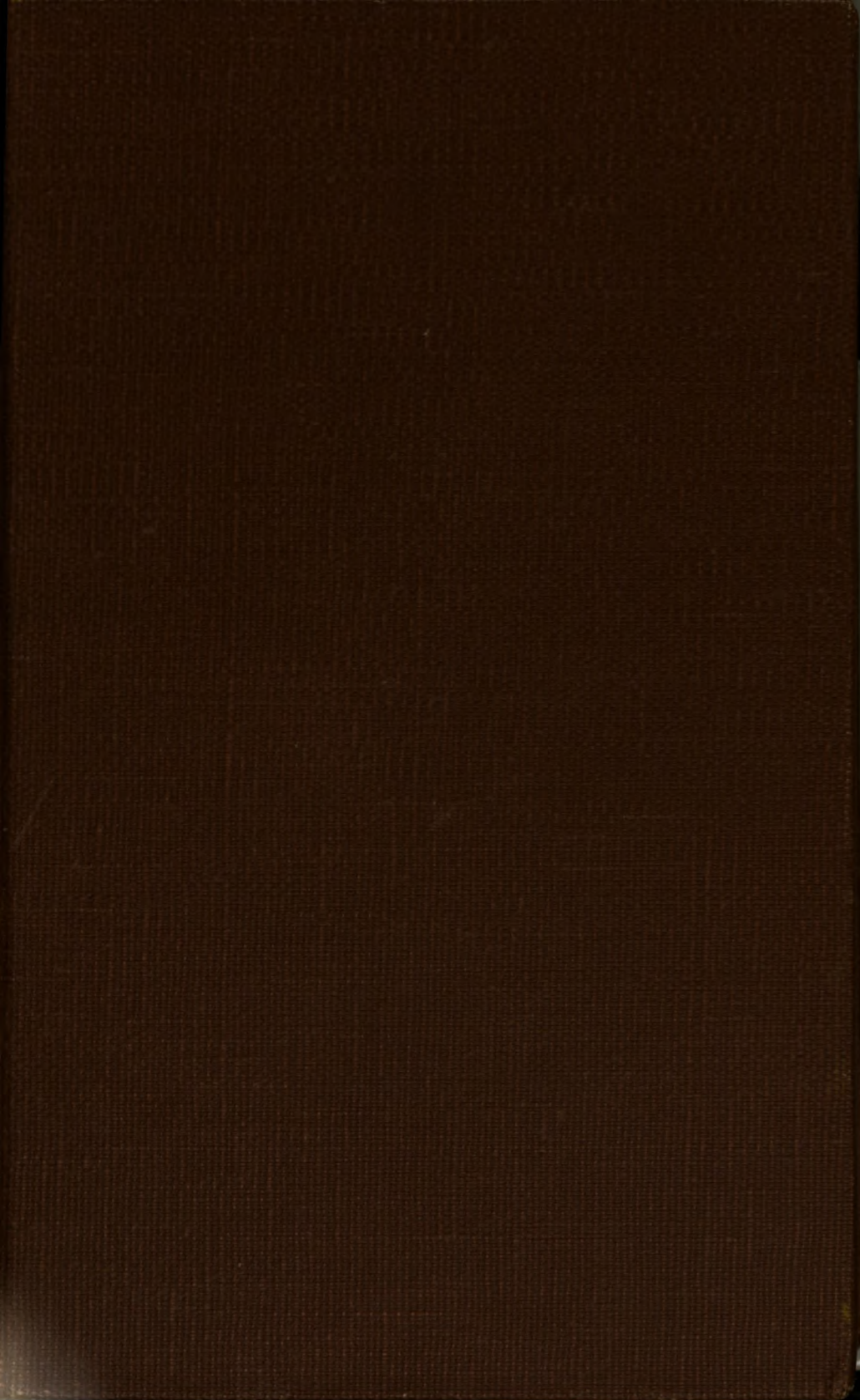

This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

Google™ books

<https://books.google.com>





THE LIBRARY



319.91

G798

1953-55

GT. Brit. Colonial office,

STATE OF BRUNEI



ANNUAL REPORT

1953 - 1955

Crown Copyright Reserved

LONDON: HER MAJESTY'S STATIONERY OFFICE 1954

(PRINTED IN SARAWAK)

25

100

319.91
G798,



COLONIAL REPORTS

Brunei
1953

LONDON: HER MAJESTY'S STATIONERY OFFICE

1954

PRICE 6s 6d NET

PRINTED IN
ENGLAND

UNIVERSITY OF MINNESOTA LIBRARY

An air view of Brunei Town.

Digitized by Google



of the history of the town

319.91
G778

CONTENTS

CHAPTER PAGE

PART I

1. GENERAL REVIEW OF 1953 1

PART II

1. POPULATION 5
2. OCCUPATION, WAGES AND LABOUR ORGANISATION 11
3. PUBLIC FINANCE AND TAXATION 17
4. CURRENCY AND BANKING 23
5. COMMERCE 25
6. PRODUCTION 27
7. SOCIAL SERVICES 59
8. LEGISLATION 103
9. JUSTICE, POLICE AND PRISON 109
10. PUBLIC WORKS AND UTILITIES 123
11. COMMUNICATIONS 143
12. PRESS, BROADCASTING, FILMS AND GOVERNMENT
INFORMATION SERVICES 153

PART III

1. GEOGRAPHY 157
2. HISTORY 159
3. ADMINISTRATION 165
4. WEIGHTS AND MEASURES 167

APPENDICES

- A. PRINCIPAL IMPORTS FOR THE YEARS 1952 AND 1953 170
B. PRINCIPAL EXPORTS FOR THE YEARS 1952 AND 1953 175

1508817

CONTENTS—(Contd.)

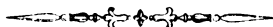
CHAPTER	PAGE
C. STATISTICS OF LAND APPLICATIONS	176
D. MONTHLY RAINFALL FOR 1953 & ANNUAL RAINFALL FOR 1952	177
E. GLOSSARY OF VERNACULAR NAMES AND TERMS ...	178
F. PROPOSED FOREST RESERVES	179
G. OUTTURN IN SOLID CUBIC FEET TIMBER AND FUEL 1953	180
H. OUTTURN OF MINOR FOREST PRODUCE 1953 ...	180
I. FOREST DEPARTMENT — STATEMENT OF REVENUE 1953	181
J. FOREST DEPARTMENT — EXPENDITURE 1953 ...	181
K. CRIME STATISTICS 1953	182
L. PUBLIC WORKS DEPARTMENT — EXPENDITURE 1953	183
M. PUBLIC WORKS DEPARTMENT	183
N. ELECTRICAL SECTION — STATEMENT OF ACCOUNTS 1953	184
O. BUILDINGS COMPLETED DURING 1953	185
P. ROADS	187
Q. BRIDLE PATHS	187
R. READING ROOM	188
S. BRUNEI — BRITISH RESIDENTS AND ASSISTANT RESIDENTS	189

ILLUSTRATIONS

An Air View of Brunei Town	<i>frontispiece</i>
Padi Treadle Thresher at the Agricultural Station, Kilanas	<i>facing page 32</i>
Rotary Hoe at Work at the Agricultural Station, Kilanas	<i>facing page 33</i>
Budgrafting of Rambutan at the Agricultural Station, Kilanas	<i>facing page 40</i>
New Cattle Shed at the Animal Breeding Farm, Jerudong	<i>insert 40 & 41</i>
Office and Milking Parlour at the Animal Farm, Jerudong	<i>insert 40 & 41</i>
Illawara Cattle at the Agricultural Station, Kilanas	<i>facing page 41</i>
H.H. The Sultan at the Controls of the Draw-Works of Seria's Drilling Location ...	<i>facing page 56</i>
A View of Seria's Marine Drilling Location ...	<i>facing page 57</i>
River Kampong Health Clinic	<i>facing page 80</i>
Two scenes of distribution of food to School Children in Brunei District	<i>insert 80 & 81</i>

ILLUSTRATIONS—(Contd.)

The interior of the Central Cookhouse for the Feeding Scheme in Brunei	<i>insert 80 & 81</i>
Distribution of food to children in a School in Brunei District	<i>insert 80 & 81</i>
Loading the Feeding Scheme River Transport at the Customs Wharf, Brunei	<i>facing page 81</i>
Loading the Feeding Scheme Vehicles in Brunei Town	<i>facing page 81</i>
New Police Station, Brunei Town	<i>facing page 112</i>
B.M.P. Company's Hangar at Anduki	<i>facing page 150</i>
Map of the State of Brunei	<i>end cover</i>



PART I

PART I

GENERAL REVIEW OF 1953

1953 can be considered as the year in which the general development and rebuilding of Brunei, outside the Oilfields Area, really made a start.

Although considerable planning had started in 1952, the rebuilding of the Kuala Belait Bazaar was completed in 1953 and the rebuilding of the Brunei Town and the Seria Bazaars made great advances.

On 29th July, 1953, His Highness the Sultan in Council approved the Brunei 5 Years Development Plan and the financial provision of \$100,000,000 for the cost of the Plan.

A Development Committee was appointed under the Chairmanship of the British Resident to consider the schemes put forward by the various heads of Government Departments. This Plan includes considerable expansion of Education throughout the State, both Technical and Academical. The Medical Services will be greatly increased and a large new Hospital built in Kuala Belait, which is the Government Station in the Oilfields Area.

The Development Plan will include schemes for the improvement of padi growing and agriculture generally.

Other schemes include a large road programme, a State Electrification Scheme, water supplies, swamp reclamation, telecommunications, Scholarships for Study Overseas, Old-age Pensions and disability Pensions, and also resettlement Schemes.

Schemes to the amount of approximately \$4,500,000 were passed by the Development Committee and approved by the State Council by the end of this year. One of these Schemes, the "School Feeding Scheme", calls for special mention. Under this

Scheme every Schoolchild in the State will receive a free meal once a day. The pilot scheme for this project was well under way by the end of the year, both in Urban and Rural areas. This Scheme is described in more detail under the chapter headed Social Services.

Other Schemes included in the sum of \$4,500,000 include rural water schemes, housing and resettlement schemes, Rubber Improvement Schemes, bridle path schemes, and funds for the purchase of heavy road building equipment.

Early in 1953 His Highness the Sultan proclaimed his wish that a Constitution be set up within the State. An Advisory Committee of seven leading Malays was formed and it was agreed that the first step to be taken should be the formation of District Advisory Councils, probably elected by the people of each district and each District Council eventually having proportionate representation in the State Council. To this end, the Advisory Committee's first duty was to visit all the towns and villages in the State in order to listen to the requests of the people themselves and ascertain their views with regard to the proposed Constitution.

The Committee had completed their report on their tour of Brunei by the end of the year, and arrangements were then made for this Committee to visit the various States in the Federation early in the New Year, with a view to studying their Constitutions and procedure and to submit a report to His Highness the Sultan, the High Commissioner for Brunei and the British Resident for consideration.

The British Malayan Petroleum Company in the year 1953 carried out their Oil Production programme in the Seria area with their usual highly skilled efficiency and energetic thoroughness. The biggest of their local problems, which was housing for labour and staff, is now almost solved.

The Oilfield has now a much more tidy appearance and conditions generally for all are much more pleasant.

There were no labour troubles during the year and relations between Labour and the Management continued to be most satisfactory. A large amount of skilled labour still has to be brought

in from Singapore and Hong Kong, but only very occasionally have any disputes arisen and these have all been settled easily, the solution usually being amicably solved by returning any dissatisfied persons to the place of recruitment at the Company's expense.

During the year the Oil Company have undertaken a considerable exploration programme in their concessions out to sea. This work required very considerable expense and engineering skill. It is, as yet, too early to say whether or not any new oil-bearing sands have been established.

The Revenue of the State has remained satisfactory during the year and again the State has been able to make very considerable increases in its reserves.

The most difficult problem which Brunei has to face for some time to come is that of Staff. The Secondary Schools are not yet producing boys and girls with a sufficiently high standard to fill the professional, technical and clerical vacancies in the State Government Staff. It will probably be another 8 years before Brunei boys and girls (in any numbers) will be fully qualified professionally and technically.

It is therefore necessary to recruit practically all our clerical and technical staff from Malaya and Hong Kong. This is proving no easy task as people are not prepared to come to Brunei to work unless paid very high wages, which, if agreed to would aggravate the problem which is also being faced by our neighbours.

The increased interest in Athletics and Team games has been very noticeable of late. The Oilfields area has always been provided with sports facilities and has always produced keen and good results. Latterly much more attention is being paid to games and athletics in the Government Schools and Clubs elsewhere in the State, the consequent improvement in Team games such as football and hockey is very marked.

Tennis is also now being encouraged by Government and facilities provided, so that those who hitherto could not afford to play now find it possible to get all the tennis they want (tennis balls provided) at about \$5 a month. The standard is much higher

than ever before with several extremely promising players outside the Oilfield Area, who acquitted themselves very ably in the State Tournaments.

A State Athletic Association was established during 1953 and it is hoped that in the not too distant future Brunei will be able to send representatives to the Malayan and Asian Meetings.

During June Baby Week and Health Week were run in Brunei State under the auspices of the Medical and Health Department. This was a great success with a great many entrants. Later, an account of the Baby Week together with the photographs of the various events was submitted for the Commonwealth Challenge Shield. It has recently been announced to the great pleasure of all in the State of Brunei, that this event had won the shield for 1953, and the magnificent Shield has already arrived in Brunei. The Medical and Health Department are to be congratulated for their skill and hard work.

His Highness The Sultan, Duli Pengiran Pemancha, Pehin Dato Perdana Mentri Haji Ibrahim, O.B.E., Inche Abbas, Pengiran Anak Chuchu Besar having been invited as guests of Her Majesty Queen Elizabeth visited England to attend Her Majesty's Coronation. His Highness was away from 23rd May to 17th June. Duli Pengiran Bendahara and Pengiran Maharaja Laila were appointed to act as Regents during His Highness's absence. On 9th June, 1953, the announcement was made that Her Majesty the Queen had graciously been pleased to bestow the honour of the K.C.M.G. on His Highness the Sultan.

Distinguished guests who visited the State during the year, include His Excellency the High Commissioner, Mr. & Mrs. Menon, Representative of the Government of India, Dr. Hoeppli, O.B.E., Swiss Consul, Dr. Hans U. Granow, German Consul General, Mr. Mackintosh, Head of Far East Section Colonial Office, Mr. I. Stourton, Deputy Inspector General of Police, Colonial Office and Miss F. Gwilliam, Assistant Education Adviser to the Colonial Office.

PART II.

Chapter I.

POPULATION

General:

BRUNEI is a Sultanate under the protection of the British Crown, lying on the North Bornean littoral, between Sarawak and British North Borneo. The State covers an area of 2,226 square miles, but is split into two parts by the Limbang District of Sarawak Territory, the Rangau Peninsula of which projects into Brunei Bay.

The latest census, of 1947, gives the State a population of 40,670 or 18.2 persons per square mile. The estimated probable population this year is 54,109. The spread of settlement, however, is uneven and 11,000 or 20% of the population inhabit the coastal plain facing the China Sea. Settlement appears to have followed immigration from the sea which is consistent with the piratical tradition of its sea-faring people.

Essentially, Brunei is a Malay State ruled by His Highness the Sultan aided by a State Council but its races are diverse. The natural trend is that the Malay-speaking population occupies the coastal plain of Brunei and the older settlements, whilst more primitive people such as the Dayaks, Dusuns, Muruts inhabit the inland forest areas where they practise a shifting hill padi cultivation. The Kedayans occupy the opened up lands of the coastal plan. The Chinese have settled in the coastal and bigger towns where commerce has been possible; they are now moving inland following upon modern industries such as timber felling and Saw milling. The historically recent discovery of Oil in the Seria/Kuala Belait coastal plain has turned jungle land into a modern industrial area attracting large numbers of European technicians and a considerable mixed labour force. The discovery of Oil has revolutionized the State, making Brunei for its size, very wealthy and

with an Annual revenue in excess of expenditure of over \$52 millions during the year. Natural population trends have consequently been upset, the cost of living has been raised producing a labour shortage and high cost of labour, but has also brought into being the possibility of the creation of a modern Welfare State. The influence of the Oilfields is now such that almost a third of the population of the State inhabits its area and vast numbers of men and women who should have been agriculturalists are now turned into workers of all types of machinery. This trend has even included the less developed races such as the Dusuns, Muruts and Dayaks. It is possible that, in some areas, such as the Ulu Belait, Chinese small holders are using the lands vacated by the original inhabitants. The Oilfield remains a predominate factor of development.

The most densely populated area follows the road system from Muara to the Baram Boundary demonstrating the importance of communications to the life of the State.

Race. The principal indigenous races of the State are Bruneis, Kedayans, Tutongs and Belaits who are Malay speaking and follow the Shafii sect of Islam with the three latter representing conversion of more primitive people.

The Brunei Malays, predominately, are fishermen, cultivators of wet padi, of rubber and fruit gardens and follow small domestic industries as craftsmanship in silver, carpentering and basket making. Formerly the Malays were responsible for a considerable fishing industry along the coast line and in the Bay of Brunei and centred on the fishing villages of Muara, Tutong and Kuala Belait. Unfortunately this trade has been attracted to the Oilfield area by the high prices obtainable there and the general population has lost much of the value of this high grade food.

The other indigenous races of the State comprise Dusuns, Muruts and Dayaks who, essentially pagan, practise uneconomic shifting cultivation, denuding the hill slopes of forest and thus, through erosion, losing the valuable top soil into the rivers. The Kedayans, through their association with the Malays, and their greater accessibility to Government, appear to be the only country people willing to adopt more economic methods of agriculture.

The more indigenous people are governed by traditional rites and customs, and, since these include matters appertaining to Pregnancy, Childbirth, the rearing of children, and sanitation, the Fertility Rate is low and the infant mortality and morbidity rates are very high. Infant mortality rates (which must be considered approximate only) follow below:—

1947	...	...	202.7 per 1,000
1948	...	...	258.5 per 1,000
1949	...	...	128.3 per 1,000
1950	...	...	136.9 per 1,000
1951	...	...	80.9 per 1,000
1952	...	...	103.9 per 1,000
1953	...	...	113.3 per 1,000

The Muruts inhabit the Temburong District, the Dusuns the watershed between the Tutong and Belait rivers, whilst the Dayaks live in the Ulu territories adjacent to the Limbang District. The Kedayans inhabit the Muara-Tutong plain.

Of the Alien races, the Chinese predominate with a total population of 10,040. Those who first entered the State during the last quarter of the 19th century are concentrated in the towns and bigger villages as established shopkeepers, traders and clerks whilst some have become small holders and agriculturalists surrounding these centres. There has been considerable post-war immigration to the Oilfield area, and of Grade II technicians to aid in building development in Brunei Town—this immigration is controlled. The Chinese have influenced the Northern coast of Borneo by trading and periodic influx over the last 1,500 years, an influence even occasionally apparent in Malay dress, custom, language and physiognomy.

In the past the numbers of Europeans have been infinitesimal compared to the remainder of the population but in the Seria-Kuala Belait area, where over 800 Europeans are employed by the Oilfields, is found probably one of the largest and most compact European communities in South-East Asia. Its influence is immense.

The Indian population is very small.

The languages spoken in the State are as diverse as the component population. The Court language is Malay, though both Malay and English are used. Colloquial Malay is the Lingua Franca throughout the State. The Principal Chinese dialects are Kheh, Hokkien and Cantonese. Malayalam is used by Indians most of whom have settled from South India.

POPULATION BY RACIAL GROUPS (1947 CENSUS)

				<i>Approximate</i>
Malays (Brunei)	...	...	...	49 %
Kedayans	...	...	...	17 %
Dayaks	...	...	...	3.5 %
Muruts	...	...	...	.5 %
Dusuns	...	...	...	7 %
Chinese	...	...	...	19 %
Indians	...	...	...	1.5 %
Europeans	...	...	...	1.5 %
Others	...	...	...	1 %

BIRTHS

		1951	1952	1953
Total Births	...	2,805	2,809	2,903
Male	...	1,524	1,405	1,496
Female	...	1,281	1,404	1,407
Birth Rate per Mille...		68.9	69.1	71

DEATHS

		1951	1952	1953
Total Deaths	...	708	865	808
Male	...	382	470	447
Female	...	326	395	361
Death Rate per Mille		17.4	21	19.9

INFANT MORTALITY

Infant Mortality	...	113.3 per 1,000 births
Rate of Stillbirth	...	4.8 per 1,000 births

NOTE: Births and Deaths Registration was introduced in 1922. The State Medical Officer is the Registrar of Births and Deaths; Deputy Registrars comprise Dispensary Dressers, District Officers and Tua2 Kampong, and Capitan Chinas. It is probably true to state that the actual circumstance and cause of Births and Deaths can only accurately be recorded in the Hospital at Brunei and Kuala Belait and to a lesser extent as reported by Outstation Dressers and Midwives. Nor is it certain that all Births and Deaths are reported from Ulu Districts although the necessity for various official certifications is now encouraging prompt registration.

Further accuracy can only be achieved by the establishment of a separate Registration Office and Outstation officials an expense probably not offset by the value gained.

Infant mortality in the State compares with that in the United Kingdom as follows:—

State Infant Mortality Rate	...	113.3 per 1,000
England & Wales Mortality Rate	...	28 per 1,000

The value of these statistics regarding infants and stillbirths lies in emphasising that the time has arrived for activities of State Welfare to penetrate into the home and countryside and to divert attention away from the institutional treatment of sickness.

Immigration. The only significant apparent trend was the excess of 2,390 arrivals over departures during the year; of these 642 were Chinese chiefly introduced by the Oilfields from Hong Kong and Singapore, and 385 Indians and Pakistanis.

The following table shows detail of Nationality of Immigrants during the year:—

Nationality	Arrivals		Departures	
	Male	Female	Male	Female
American ...	16	13	13	15
British (Indigenous) ...	1,152	372	1,138	367
British Dayaks ...	1,493	184	1,123	167
British Malays ...	4,128	2,058	3,727	1,824
British (Non Indigenous)	412	218	302	161

Nationality			Arrivals		Departures		
			Male	Female	Male	Female	
Burmese	...	...	33	24	25	14
Chinese (British & Aliens)			10,619	4,016	9,974	4,019	
Dutch	...	...	262	104	187	85
French	...	...	17	5	15	7
Indian & Pakistanis	...	...	1,157	150	793	129
Indonesian	...	...	110	29	93	30
Swiss	...	...	27	4	26	4
Others	...	...	114	44	108	25
TOTAL			...	19540	7,221	17,524	6,847

Aliens coming into the State have to obtain a permit of entry. British subjects can come in on their passports and are allowed to stay up a limit of three months. If they wish to stay longer, they have to apply for permission to stay. This permission is granted liberally provided that the applicant has employment or some person with whom to stay. In every case—i.e. aliens and British subjects—who wish to stay have to produce a sponsor who will be responsible for their repatriation when necessary.

Persons coming in from Sarawak and North Borneo are treated in the same way, provided they have travel documents to ensure their re-entry into their home area.

There were 705 new applications for Identity Cards, and 148 surrenders of Cards on account of death and departure.

Chapter II.

OCCUPATION, WAGES AND LABOUR ORGANISATION

BRUNEI State has a wide variation in the type of occupation offered, and virtually no unemployment problem. At one end of the scale is the cultivation of smallholdings by the rural indigenous population engaged in self-sufficient agricultural pursuits, varied by the catching of fish or the harvesting of jungle produce. At the other extreme is the oilfield of Seria, where employment (and preliminary training, if necessary) is available in very many of the skilled and advanced trades of the industrial world.

Although the recession in the world rubber market has curtailed what little small-holder rubber production takes place in Brunei, there was a small but definite expansion during 1953 of market gardening activity in the western area of the State, probably brought about by the oilfield area's demand for fresh, locally-grown vegetables.

Seria oilfield continued to expand in size during 1953, although (as will be noted elsewhere in this report) the actual output of crude oil was very slightly smaller. Seria continued to make a most valuable contribution to the Commonwealth's overall supplies of non-dollar oil.

By the end of 1953 the British Malayan Petroleum Company Limited at Seria had in its service 1,182 European and Asian staff, and a Labour Force of 4,952 Asians, composed as follows:

<i>Nationality</i>				<i>Unskilled</i>	<i>Skilled</i>	<i>Total</i>
Chinese	...	...	...	620	1,071	1,691
Malays	...	...	...	806	996	1,802
Indians	...	...	...	112	601	713
Dayaks	...	...	...	587	101	688
Javanese	...	...	...	19	27	46
Others	...	...	...	1	11	12
TOTAL				2,145	2,807	4,952

Rates of Pay:

The basic rates of pay for labour in the oilfield range from \$3.56 to \$9.30 per day. Every effort has been, and continues to be, made by the oil company to promote the physical and mental well-being of its employees. That this is appreciated is undoubtedly shown by the fact that the oilfield was completely free from labour unrest during 1953 (as in previous years).

The following facts give an indication of some of the amenities provided by the company for its staff and workers.

Health:

The Company maintains a modernly-equipped and well-staffed hospital at Kuala Belait, associated with which is an emergency medical and ambulance service which covers the oilfield area. There are First Aid points throughout the oilfield, and strategically-disposed medical clinics to which the staff can report in lieu of making a ten-mile trip to Kuala Belait hospital. Especially for maternal and child welfare, the company runs a Pre- and Post-natal clinic which was used to an increased extent during 1953.

A widespread campaign against malaria is conducted jointly by Government and the company. This involves a routine check on all new arrivals for malaria-proneness, and active measures to eliminate the mosquitoes by draining and spraying possible breeding grounds. About 70,000 gallons of treated light oil were used in 1953 alone for this preventive spraying.

To reinforce a B.C.G. mass-examination conducted during 1952, the British Malayan Petroleum Company introduced mass-radiography during 1953, and by the end of the year virtually the whole of the Labour Force and many of the senior Asian staff had been so examined. Expatriate staff engaged in Britain and elsewhere undergo this examination before being sent for duty to the Seria oilfield.

Clubs:

There are four clubs for Labour Force employees in Seria oilfield, each run by a management committee elected from among club members. Company Management takes a great interest in

the activities of these clubs, and although the policy is one of non-interference, timely assistance is given (financially or otherwise) whenever this appears to be necessary. The amenities at these clubs are constantly being extended.

The clubs each have their own affiliated sporting organisations, and facilities and equipment are provided for, among others, the games of football, cricket, hockey, badminton and volley ball, as well as indoor games.

For the Regional Staff (senior Asian staff) there exists a recreation club which offers similar facilities.

A praiseworthy and encouraging feature of 1953 was the increased number of Company employees (of all nationalities and grades) who took advantage of the membership facilities offered by the Kuala Belait Recreation Club. This Club is situated in Kuala Belait padang, and is virtually the only club in the area which has no Company affiliations. Its members include Government officers and members of the commercial community, and it has proved to be a most valuable common meeting ground for people with widely-differing interests.

Cinema:

The oil company operates a cinema of temporary open-air construction at Seria. Shows are held on five nights a week, and the films exhibited include as well as British and American Productions, pictures in Malay, Chinese, Tamil and other Indian vernaculars.

Transport:

The oil company operates its own transport system, and for Labour Force provides free transport to and from work, to and from the cinema, and (for dependants) to and from the local shopping centres at Seria and Kuala Belait.

Regional staff and Senior staff are similarly provided with a joint free transport service which covers the whole area.

Welfare Committees:

Welfare Committees offering a friendly and efficient channel of communication between the workers and Company Management have been in operation for some years past. Towards the end of 1953, preparations were made to hold "free" elections for the Labour Force Welfare Committee in Seria and Kuala Belait: hitherto, representatives on the Committee were nominated by the Company. (In point of fact, this election was held within the first few days of 1954, and was extremely successful. The Labour Force showed great interest in the matter, and more than one hundred nominations for office were received.)

Housing:

The oil company's programme for the provision of permanent houses for all its employees continued to make great progress during 1953. Since the end of the war it has been the Company's policy to give a priority to the construction of houses for Labour Force and Regional Staff: a satisfactory rate of progress having been reached by the beginning of 1953, some extra effort was directed towards building homes for Senior Staff families. The bringing to bear of extra contract labour and an augmented amount of equipment ensured that the rate of completion of Senior Staff houses was speeded up without in any way diminishing progress on Labour Force and Regional Staff housing.

Safety:

An energetic campaign against road and industrial accidents was continued and augmented during 1953 in the oilfields. A special Safety Department was created and enlarged during the year, and by the end of 1953 these measures were beginning to show noticeable effect.

Education:

In addition to subsidising the attendance of children of its workers at non-Company schools in Seria and Kuala Belait, the oil company runs its own school for the children of Senior Staff

employees. The curriculum here is aimed at ensuring that the children's European-standard education will continue without a break if and when the parents return to their homelands.

The oil company runs two Trades Schools at Seria—a Preparatory Trades School which gives basic education up to Standard IV, from which entrants pass on to the Trades School proper. Here their general education is continued, but technical apprentice training is given to fit boys to become artisan-improvers in company service. Entry to either Trades Schools is open to pupils from any school in British Borneo.

Comparative figures over the last few years show the growth of the Trades School :

Number of apprentices at the end of 1952 : 67

Number of apprentices at the end of 1953: 100

Number of apprentices at the end of 1954 : 130 (estimated)

Late in 1953 the Government and the Company engaged in negotiations for stepping up the intake of Brunei youths into the Trades Schools, but the preparatory work will take a considerable time to carry out, and it is improbable that results will be seen before the middle of 1954.

The oil company, in addition to the foregoing, grants a number of scholarships to the children both of Labour Force and Regional Staff to assist them to pass the Senior Cambridge Examination, or to continue their technical studies. The award of such a scholarship in no way binds the recipient to enter Company employment on completion of the scholarship.

Chinese, Malay and English classes are organised for staff of all grades who do not speak these languages. During 1953 Company Management made it obligatory for all senior and regional expatriate staff to acquire a working knowledge of the Malay language, the degree of accomplishment required being scaled in accordance with the type of work the student is doing.

Approved correspondence courses are subsidised by the Company for employees who will benefit from them.

The following table shows the racial distribution of the labour employed according to the principal categories of employment:—

<i>Race</i>			<i>Government (Public Works)</i>	<i>Rubber</i>	<i>Total</i>
Malays & Bruneis	...	...	1,166	235	1,401
Dayaks	...	...	49	30	79
Chinese	...	...	33	4	37
Indians	...	...	8	—	8
Javanese	...	...	—	5	5
Others	...	...	5	—	5
TOTAL			1,261	274	1,535

Chapter III.

PUBLIC FINANCE AND TAXATION

Revenue and Expenditure:

Comparative figures of Revenue and Expenditure for the year 1952 and the revised Estimates for 1953 are given below:—

		1952 (Actual)	1953 (Partly Estimated)
		\$	\$
Revenue	... ..	75,652,619	99,367,000
Expenditure	... ..	13,846,239	23,845,500
Surplus	... ..	<u>61,806,380</u>	<u>75,521,500</u>

Revenue:

There was a considerable increase of revenue under the following headings:—

		\$
Import Duties increased by	... ..	1,174,500
Income Tax increased by	... ..	19,395,000
Passenger Fares increased by	... ..	11,000
Sale of Electricity increased by	... ..	44,500
Interest increased by	... ..	3,850,000

The rate of Income Tax on Companies was increased from 20% to 30% on 1st January, 1953—hence the large increase of revenue.

There was a decrease of revenue under the following headings:—

		\$
Export Duties decreased by	... ..	115,000
Oil Royalties decreased by	... ..	1,308,000
Sale of Stamps decreased by	... ..	134,000
Land Sales decreased by	... ..	112,000

Expenditure:

There was a considerable increase of Expenditure which was reflected in almost all departments. The Public Works Department once again doubled its non-recurrent expenditure as the tempo increased.

The main heads of Revenue are as follows:—

	1952 (Actual) \$	1953 (Partly Estimated) \$
Duties, Taxes & Licences	44,838,286	65,293,800
Fees of Courts etc. ...	226,694	208,500
Government Undertakings	572,845	516,500
Revenue from Government		
Property	26,983,704	25,689,000
Interest	2,789,253	6,642,500
Miscellaneous		887,500
Land Sales	241,837	129,500
	<hr/> 75,652,619	<hr/> 99,367,000

The main heads of Expenditure are as follows:—

	1952 (Actual) \$	1953 (Partly Estimated) \$
Pensions, Retiring		
Allowances	58,645	80,700
H.H. the Sultan	225,968	323,200
Ministers	27,221	59,000
British Resident	62,882	101,000
Assistant Resident, Belait	30,401	52,500
Agriculture	291,528	592,100
Audit	9,815	21,700
Co-operative Development	—	3,200
Customs & Marine ...	304,102	657,400
Education	319,380	589,000
Electrical	281,480	559,500
Forests	47,878	86,700
Information Service ...	—	61,500
Judicial	22,086	39,500

	1952 (Actual) \$	1953 (Partly Estimated) \$
Land & District Offices ...	586,725	1,516,800
Legal ...	—	14,200
Medical & Health ...	726,873	1,096,900
Miscellaneous Services ...	2,773,482	3,589,500
Municipal ...	192,025	292,200
National Registration ...	1,578	3,100
Police & Prisons ...	336,841	721,800
Postal Services ...	305,372	184,200
Religious Affairs ...	31,552	77,600
Supplies ...	—	257,100
Survey ...	—	333,200
Telecommunications ...	—	293,500
Treasury ...	31,469	52,700
Public Works Department	105,207	831,600
Public Works—		
Annually Recurrent	1,450,680	1,311,100
Public Works—		
Non-Recurrent ...	5,623,049	10,043,000
	<hr/> 13,846,239	<hr/> 23,845,500
Development Scheme ...	—	205,625
	<hr/> 13,846,239	<hr/> 24,051,125

Public Debt:

The State has no public debt.

Assets & Liabilities:

STATEMENT OF ASSETS & LIABILITIES AS AT 31.12.1952

LIABILITIES

Previous Year

1951			
\$			\$
594,052.12	Deposits	...	747,958.43
28,554.40	Current Account	...	783,902.38
7,252,727.50	General Reserve Fund	...	61,304,992.46
451.72	Drafts & Remittances	...	—
73,907,070.87	General Revenue Balance	...	81,682,781.69
<hr/> 81,782,856.61			<hr/> 144,519,634.96

ASSETS				
3,648,506.90	Cash in Treasury & Banks	...	...	1,074,928.38
1,059.14	Crown Agents	...	...	7,056.89
1,645,714.29	Joint Colonial Fund	...	...	3,788,571.43
	Investments:			
7,252,727.50	General Reserve	...	...	61,304,992.46
67,979,063.67	Surplus Balances	...	...	74,664,276.78
97,878.32	Loans	...	...	1,085,868.40
581,152.24	Advances	...	...	1,528,144.06
422,304.80	Suspense	...	...	196,075.21
154,449.75	Supply Depot	...	...	865,610.09
—	Drafts & Remittances	...	...	192.80
—	Current Account	...	...	3,918.46
<hr/>				<hr/>
81,782,856.61				144,519,634.96
<hr/>				<hr/>

Five Year Development Plan:

In the latter part of 1953 a Development Plan was approved in principle to extend over approximately 5 years. A sum of \$100,000,000 was set aside from Surplus Funds for this purpose. It was not until the last quarter of the year that the first part of the Plan was ready to be put in action. Supplementary expenditure for a sum of \$2,000,000 was approved for the initial schemes to be put into effect. Further provision will be authorized as the various schemes are prepared in detail and approved by State Council. The approved estimates are published as Part II of the Annual Estimates.

Taxation:

The main sources of income under this head are shown hereunder:—

					1953
					(Partly Estimated)
					\$
Import Duties	...	...	...	...	4,057,300
Export Duties	...	...	...	...	88,850
Excise Duties	...	...	...	...	41,600
Vehicles & Drivers Licences	...	...	...	...	79,150
Income Tax	...	...	...	...	60,979,100
Arms	...	...	...	...	7,800
Stamp Duties	...	...	...	...	6,700

Customs Tariff:

The Chief features of the Customs tariff are as follows:—

- (a) Import Duties — Intoxicating liquors; tobacco; sugar; petroleum; matches; coffee; tea; milk; soap; salt; cosmetics; textiles; perfumery; vehicles; musical instruments; fireworks; electrical apparatus; cameras; timber; furniture and refrigerators.
- (b) Export Duties — Copra; dried & salted fish; sago; live-stock and plantation rubber.

Excise and Stamp Duties:

- (a) Excise duty is charged on distilled samsu which is the only intoxicating liquor made locally.
- (b) Stamp duties are imposed on all documents required to be stamped under the Stamp Enactment.

Income Tax:

The rate of income tax for registered companies was raised to 30% on 1st January, 1953.

Chapter IV.

CURRENCY AND BANKING

The State is a party to the Malayan Currency Agreement and Malayan currency is the only legal tender.

The standard coin is the Malayan silver dollar with a par of two shillings and four pence, at which it is linked to sterling. Subsidiary nickel coins are those of value of 20 cents, 10 cents and 5 cents. There is also a copper coin of 1 cent. Currency notes are issued in different denominations from 50 cents upwards.

Banks operating in Brunei State are as follows:—

- (a) Hongkong and Shanghai Banking Corporation with branches at Brunei Town and Kuala Belait.
- (b) Post Office Savings Bank with branches at Brunei Town and Kuala Belait.

The total number of depositors and the amount standing to their credit with the Post Office Savings Bank at the close of the years 1950, 1951, 1952 and 1953 were as follows:—

<i>Year</i>				<i>Number of Depositors</i>	<i>Amount \$</i>
1950	...	...	...	759	195,455
1951	...	...	...	928	265,605
1952	...	...	...	1,162	374,122
1953	...	...	...	1,399	521,378

Chapter V.

COMMERCE

The total of trade (import and export) amounted to \$405,915,275 as compared with \$364,197,933 in 1952.

Imports:

The total imports amounted to \$123,322,162 as compared with \$76,719,967 the previous year. The increase is chiefly due to larger imports of machineries, iron and steel, cinematographic films, tractors and vehicles, construction materials and paints, petroleum products, furnitures, cotton and textile materials and tobacco. Details of imports for the years 1952 and 1953 are given in Appendix "A".

Exports:

The total exports amounted to \$282,593,113 as compared with \$275,633,204 the previous year. The export of crude oil decreased by 190,721 long tons against 1952 figures.

The amount of plantation rubber exported in 1953 was less by over one million pounds than in the previous year. This decrease is chiefly due to the constant fall in prices from 92-1/8 cents per pound in January to 53-3/8 cents in October.

The firewood trade with Hongkong continues and exports decreased by over two thousand tons compared with the previous year.

Details of the principal exports are given in Appendix "B".

Chapter VI.

(a) LAND UTILIZATION AND TENURE

Utilization of Agricultural Land:

ANY native of Brunei, or any non-native of over seven years unbroken residence in Brunei, may acquire land in perpetuity in the State for agricultural purposes. Non-natives who have less than seven years residential qualification may also acquire land with the approval of the State Council but such approval is usually granted for leases of a shorter term.

Appendix "C" indicates uses to which such agricultural land is put. It will be noted that the majority of such lots, since the slump in rubber, are put under fruits and vegetables. The grant is subject under the Land Code to a clause providing that cultivation takes place within three years.

The method of application is on a prescribed form accompanied by a deposit of \$5 to the Assistant Collector of Land Revenue of the District concerned. The land is then inspected to ensure its suitability for the purpose under application, and if it be approved, a premium from \$0.40 to \$2 per acre becomes payable. The application is then sent across to the Department of Survey for final survey.

In recent years the value of agricultural land, particularly near the large towns, has been considerably enhanced. This has led to villagers desiring to take out a title to their land. Originally a "Kampong" was set aside a parcel of land for all purposes. Since the war the tendency has been increasingly towards the break-up of the old compact "Kampong" and many villagers are acquiring a small holding of three to four acres for both residential and agricultural purposes. This applies more particularly to the Kedayan element of the community. The result has been a very marked increase in the number of applications received annually.

During the past year the various Land Offices have been unable to cope adequately with the vast increase in the number of applications, coupled with the accumulation of applications received but not dealt with during the war years. Proposed increases in Land Office staff are calculated however to remedy the situation.

A further complication in this work has been that in the past many years villagers have planted slow growing fruit trees indiscriminately over the countryside. They are now seeking to take up under permanent title ancestral fruit groves, thus entailing considerable difficulty in the practical work of survey.

District Officers and others are giving considerable encouragement to villagers to take out a Title for an agricultural lot. Notwithstanding this it continues to be the policy of Government to set aside an area near each "Kampong" for buffalo grazing. This is scheduled as a Reserve and, whereas no grant to the "Kampong" is issued, it is not subject to alienation to others. This is the most economic means of ensuring the maximum use of grazing land and also that interference by buffalo with crops is reduced to a minimum.

With the advent of the bicycle now practically in every home, the tendency has been throughout the year to develop land along existing roads and tracks and to obtain Title to that land. Away from the towns there are still very large Reserves of excellent agricultural land awaiting development. New roads are being constructed to open up such areas. In other areas Government is carrying out large scale re-settlement schemes.

Statistics of land applications can also be seen at Appendix "C".

Land and Water Conservation and Utilization:

By a notification issued in 1951, road and river Reserves have been imposed on all roads and all major rivers within the State. New grants of land during 1953 were not allowed to encroach upon these Reserves but in regard to Titles hitherto issued it has been necessary for Government to pay compensation before taking over land required for road expansion and river clearings.

Under the Forest Enactment it is illegal for any person to fell primary forest for the purpose of agriculture without first obtaining permission from the State Forest Officer and District Officer. Such permission is normally withheld unless the applicant can show that there is no other vacant and suitable land available.

Land Ownership:

Government policy in regard to agricultural land has been detailed above; agricultural land is normally leased in perpetuity to natives or to non-natives of over seven years residency in the State. For the purpose of such alienation agricultural land may be divided into three classes as follows:—

- (a) small holdings not exceeding ten acres in area,
- (b) medium holdings not exceeding 100 acres in area, and,
- (c) large holdings exceeding 100 acres in area.

Terms of alienation for small holdings for any form of cultivation except padi or rumbia, are as follows:—

Premium

(a) with road frontage per acre ...	...	...	\$2.00
(b) without road frontage per acre ...	...	...	\$1.00
(c) rent per acre per annum ...	...	...	\$1.00

For padi and rumbia there is no premium but a rent of 40 cents per acre per annum is payable.

Terms for medium holders vary slightly.

Rubber:

Premium

(a) with road frontage per acre ...	...	...	\$2.00
(b) without road frontage per acre ...	...	...	\$1.00
(c) rent for the first six years per acre per annum			\$0.50
(d) rent thereafter per acre per annum ...	...	...	\$2.50

*Coconut and Other Forms of Cultivation:**Premium*

(a) with road frontage per acre	\$1.00
(b) without road frontage per acre	\$0.50
(c) rent for the first six years per acre per annum	\$0.50
(d) rent thereafter per acre per annum	\$1.00

The terms for large holdings are as follows:—

Premium—\$2, \$3 or \$4 per acre according to quality and situation of the land.

Rent—same as for medium holdings.

In regard to land within the Municipal Areas, or to land outside Municipal Areas required for other purposes than agriculture, there is no definite scale of fees payable. The terms of leases vary widely depending upon the purpose for which the land is required. Thus the new permanent shop houses are rented on a ninety-nine years lease but land required near Brunei Town by Contractors on Development Scheme work is proposed on a five-year lease only. Premium and rent likewise vary considerably depending on the nature of the land, its use and the length of time for which it is to be leased.

It is to be noticed that a very considerable increase in the value of land near the large townships has been experienced during 1953. Thus land which was sold as a private transaction in 1952 at \$2,000 per acre was sold again at the end of 1953 at \$9,000 per acre. There is no restriction on persons sub-letting land to which they have Title but it has hitherto often been the practice for such sub-letting between natives of Brunei to be done as a private transaction without reference to the Land Office. Owing to the recently inflated land prices, such rents have reached alarmingly high proportions in the towns.

In addition to the methods of alienation described above there is also the Temporary Occupation Licence which is available to any person whether native or non-native on payment of \$1 per acre per annum. This licence is not renewable and is subject to cancellation at the end of the year and it prescribes therefore that no permanent crops may be planted nor permanent buildings

erected on the land. This form of licence is most frequently issued to a person who has made application for a permanent grant but who may have to wait a considerable time before the final issue of that grant. Such applications are not normally turned down and a Temporary Occupation Licence enables the would-be applicant to make immediately a start in the development of the land.

Finally it should be noted that no Grant or Title is issued to any person living in the Malay traditional style over water. His right to remain there is vested only in native custom.

Re-settlement:

Re-settlement schemes are primarily designed to encourage Malays living in unhygienic circumstances over water to move in land and take up agricultural pursuits. In one area near Brunei Town small lots are being allocated primarily to persons working in the Town. The method in general is that areas of first-class agricultural land are surveyed into three acre lots and developed with access roads and paths and water services etc. Malays living over water are encouraged to move into these lots and, if they agree to move, are given a cash bonus and also a family subsidy for a month in order to defray some of the expenses of moving. No compulsion is of course exercised and some tradesmen, and fishermen, are unlikely to move for a considerable time to come. However, response has been excellent from the other classes of workers who are glad to have a lot of land which they and their wives can cultivate. There is in addition a Settlement Area open to all classes of the population, but particularly to Malays and Kedayans, in a large tract of land which is being opened up. Normal services are being provided, and residents may settle on payment of the normal premium.

(b) AGRICULTURE

Weather:

Rainfall was fairly evenly distributed throughout the year; the weather being much drier than usual. The driest months were in March and August. The weather during the year was ideal and one of the main factors which attributed to the success of certain crops, particularly padi. The record of rainfall during the year is shown in the Appendix "D".

CROP REPORTS

Rubber:

The area under rubber at the end of the year was approximately 30,575 acres, an increase of 381 acres over the previous year. The increase noted was chiefly due to new planting amongst the small-holders. No replanting was carried out during the year.

The price of rubber smoked sheets during the period under review was in the region of \$65 per picul, but towards the end of the year there was a slight fall in price.

A total of 1,169 tons of rubber sheet was exported during the year. The figure showed a decrease as compared with last year's figure. During the last quarter there was a progressive fall in production, this was most obvious amongst the small-holders. Many small-holdings were temporarily abandoned during the year as there was little likelihood of obtaining better prices.

Wintering occurred at different intervals. In Brunei district it was clearly observed in February, but in Tutong district it did not occur until April, and was checked immediately by rain.

Diseases:

Among the diseases encountered during the year were Mouldy rot and Black stripe caused by fungi *Ceratostomella fimbriata* and *Pytophthora* sp. respectively. Both these fungi attacked the tapping panel. Fortunately no serious damage occurred.

Root diseases also occurred, particularly *Fomes lignosus* and *Ganoderma pseudoferreum*. In some areas Dry rot disease (*Ustulina zonata*) was in evidence.

Termites (*Coptotermes curvignathus*) and shot hole borer (*Xyloborus fornicatus*) were also reported from time to time during the year but the damage caused was not of a material nature.



Padi Treadle Thresher at the Agricultural Station, Kilanas.



Rotary Hoe at work at the Agricultural Station, Kilanas.

Padi (Season 1952-1953):

A summary of the district returns of estimated acreage and yields is given in the table below:—

District	Wet		Dry		Total	
	Acre	Gantangs	Acre	Gantangs	Acre	Gantangs
Brunei & Muara ...	2,360	642,525	1,180	205,985	3,540	848,510
Tutong ...	1,099	398,720	1,395	461,699	2,494	860,419
Belait ...	418	60,200	503	97,060	921	157,260
Temburong ...	570	203,720	245	61,050	815	264,770
Total:	4,447	1,305,165	3,323	825,794	7,770	2,130,959

The following table shows the acreage yield in gantangs of padi for season 1952/53 as compared with the season 1951/52.

Season	Dry Padi Acreage	Approx. yield in Gantangs	Dry Padi Acreage	Approx. yield in Gantangs	Grand Acreage	Total Est. yield in Gantangs
1951 - 52 ...	4,982	1,101,760	3,814	466,365	8,796	1,568,125
1952 - 53 ...	4,447	1,305,165	3,323	825,794	7,770	2,130,959
Increase or Decrease	- 535	+ 203,405	- 491	+ 359,429	- 1,026	+ 562,834

It will be noted that in spite of the decrease in area, an increase in production was obtained. The reason for the decrease in area was due to some areas which were temporarily abandoned because of unsuitability for padi cultivation every season. Another reason was that many padi planters preferred to work in the British Malayan Petroleum Company or with one of the many building contractors where higher wages were obtained.

The excess in yield was chiefly due to a suitable weather condition and negligible damage from padi insects and rats.

Padi (Season 1953-1954):

The area brought into cultivation is estimated 6,099 acres under wet padi and 3,035 acres under dry. The figures showed an increase of 1,652 acres under wet and a decrease of 288 acres under dry.

The felling of jungle in connection with dry padi cultivation undertaken at different intervals, secondary virgin jungle being cut down earlier than the blukar. Reason for this was that the burning of timber could be affected at the same time. In most cases planting were completed in September. The germination of grain was quite satisfactory and seedlings were also very healthy. Unfortunately the crop suffered from drought during flowering stage and it is feared that yield may be affected to a certain extent.

Wet padi seeds were sown according to schedule, except in certain areas where water was not readily available. Therefore transplanting was unavoidably delayed due to drought. The seedlings had an excellent start; but when the crops began to flower they were retarded again by short dry spell. It is difficult to estimate to what extent yield is affected.

Sago:

According to 1953 census the area under sago is estimated at 2,472 acres compared with 2,256 acres in 1952. The total production of raw sago, estimated 3,857 piculs, was exported. The quality of raw sago produced by the local peasants still remained crude, nothing much being done for its improvement. The price

of raw sago during the year was in the neighbourhood of \$12 per picul. No attempt was made to manufacture sago flour.

Coconut:

The area planted under coconut was increased from 1,526 acres to 1,648 acres according to 1953 census. The increase was chiefly due to new planting mainly in Tutong district. Coconut seedlings were supplied by the Agricultural department at the rate of 50 cents each. The production of matured nut is inadequate, as a result no copra was manufactured in the State. Matured nuts are being used for home consumption only by the local peasants. The price for matured nut during the year was 30 cents each.

Fruits:

There was only a slight increase in area under fruit trees. The main work during the year was filling in gaps which were not fully planted. The total estimated area was 1,450 acres against 1,438 in 1952.

Various kinds of fruits were plentiful and well exceeded the previous season. Particularly langsat, durian, terap, rambutan, chempedak and mangosteen. Interest was maintained in banana cultivation. It was also interesting to note that demands for budded fruit plants were greater than the supply during the period under review.

Market Gardens:

The area under market gardens in the State, for some reasons has slightly decreased during the year. The chief reason is because the oil company took a large area of land along Kuala Belait/Seria road which belonged to Chinese vegetable gardeners. Secondly, many vegetable planters left their land to seek employment. This was the case with the people of Kampong Subok.

Other Food Crops:

A considerable area of perennial and short term crops exists, the latter being frequently on dry padi land interplanted with padi. Sugar-cane and miscellaneous vegetables are commonly grown close to the dwelling house of the peasants.

AGRICULTURAL AND PADI TEST STATIONS

Agricultural Station, Kilanas:

A steady progress was made at the station during the year inspite of limited space for further development. The general maintenance work was being carried out satisfactorily.

In view of the expansion of poultry husbandry at the station a new site was opened up towards the end of the year. Besides being a small area the present site was found unsuitable and badly contaminated, it was therefore decided to transfer the existing stock to the new proposed area. The new site was on a hill where coffee trees were formerly grown, and not doing very well. The top was degraded to four-feet and levelled by means of calf-dozer.

A flower nursery was established during the year. It was looked after by an Agricultural Subordinate who had received a course on horticulture in Botanical Garden in Singapore. Various kinds of flowers and road-side trees were planted for breeding and multiplication purposes. A few varieties of flowers and road-side trees imported from the Botanic Gardens, Singapore were also planted. The object of the nursery is to supply planting materials for Brunei Town Area, Istana, Residency, High Commissioner's Lodge, Muara and Kuala Belait Town Area.

The old fruit nursery was demolished owing to stocks being unfit for budding. A new nursery was re-established on the same site and sown with pulasan and rambutan seeds. A good number of budded materials was sold out to the small-holders during the year.

The necessary extension of the existing garage was undertaken and completed towards the end of the year.

Padi Test Plot—Season 1953-54:

The area cultivated this season is approximately 20 acres. No special form of experiment was carried out during the season, except concentrations on multiplication and production. The crops appeared to be quite healthy and a good harvest may be expected. Occurrence of rats and other pests damage was practically negligible.

An experiment to find out the possibility of planting two crops of padi in a year was carried out. Unfortunately it was a total failure. At the beginning the seedlings made a good start, and it was found later that the crop flowered a little longer than in the normal season. The grains were badly attacked by *Leptocorisa acuta* despite many efforts to control the pest.

Agricultural Station, Birau:

Besides the general maintenance work several minor improvements were also carried out. Attention to manuring, pruning and control of certain pests and diseases were also carried out. In response to this the crops appeared to be healthy and vigorous in growth. A small vegetable garden was maintained satisfactorily, and various kinds of vegetables were planted and the produces were sold to the Nurses Home and the general public.

An acre of padi demonstration plot was maintained satisfactorily during the year which served its purpose as a demonstration. During harvest time the Penghulus and Ketuas in Tutong district were invited to witness a demonstration on the use of sickles for harvesting and the use of foot-power Thrashing Machine. They were very much impressed to see the speed in which the work could be carried out. Normally harvesting is carried out by the "tuai" which method is not only slow but involves a lot of workers. The former method has the advantage of being simple and quicker in this operation and at the same time the straw can easily be collected and used for beddings for cattle or for composting purposes.

Wet Padi Settlement Area, Mulaut-Season 1952-53:

The estimated area under cultivation was approximately 24 acres as compared with 40 acres during the previous season. The remaining 16 acres were given to local peasants for padi cultivation.

The crop harvest during the year was not very satisfactory, although the average yield per acre was higher than the figure obtained last year. The low yield was due chiefly to unseasonal rain which caused areas being flooded and coupled with damage done by padi bugs (*Scortinophora coarctata*).

SEASON 1953-54

The area under cultivation this season was approximately 24 acres. Trampling of sawah was delayed due to dry weather, and as a result transplanting was not within schedule. The seedlings had made a very good start, but unfortunately the drought came once again followed by wind at the time of flowering causing losses and reduction in crop over the whole area.

Padi Test Station, Lumapas—Season 1952-53:

An excellent crop was reaped during the season. The average yield per acre was very much higher than that obtained at other stations. An ideal weather condition and the absence of rats contributed to the success of the crop.

SEASON 1953-54

An area of approximately 6 acres was again cultivated during the year, and similar strains used in previous year were planted. Dry weather prevailed again and in consequence preparation of sawah was much delayed. A temporary earth dam had therefore to be constructed in order to supplement water to the padi plot as well as to some of the neighbouring areas. Judging from the vegetative growth a good yield could be expected this season.

Rice Mills:

A total of only 6,377 gantings of padi was milled by the Government mill at the Agricultural Station, Kilanas during the year as compared with 17,789 gantangs in 1952. The decrease was chiefly due to the existence of 3 privately owned mills in the vicinity.

There are 10 rice mills operating in the State during the period under review.

During the year a total of 123,994 gantangs of padi was milled by private-owned mills, an increase of 9,310 gantangs over the previous year. The cost of milling per gantang of padi was at the rate of 6 cents.

Agricultural Show:

The usual Annual State Agricultural Show was held on the 15th July, 1953 at the Sultan Mohammed Jamalul' Alam Malay School, Brunei. It is of interest to note that since it was first organised the State Agricultural Show had grown in size and the variety of its exhibits. There were large entries in the poultry section, flower section, carpentry and woodcarving section, ironware antique section and home produce cooking section. Cash prizes were awarded to all the winners.

Special section of Silverware, Brassware and Arts and Crafts were also exhibited, and prizes for these were awarded by the Commissioner-General, South-East Asia.

There was also a departmental stand on which various agricultural produces were exhibited. This proved to be the main attraction of the show.

Other Instructional Activities:

On two occasions local Penghulus and Ketuas were invited to the Agricultural Station, Kilanas to witness a demonstration on the use of tractors with various attachments and the asexual propagation of plants. This was followed by a lecture on Agriculture and Poultry Husbandry. A similar lecture was also given to two batches of teachers with their families who came from Lawas (Fifth Division of Sarawak). The parties were headed by Dr. Lees.

Other notable visitors to the stations were the British Resident, Brunei, the Honourable Mr. J. O. Gilbert, Director of Agriculture, Sarawak, R. W. R. Miller Esq., Deputy Director of Agriculture, Sarawak, F. J. Harper Esq., Agricultural Officer, Kuching, Mr. K. E. H. Kay, Agricultural Officer, Fifth Division, Mr. W. N. Smyth, and Assistant Resident, Brunei, Mr. J. T. Weekes. Occasional visits were also made by the local farmers.

Administration:

The appointment of Enche Hamidoon bin Awang Damit as State Agricultural Officer, Brunei, was confirmed on 1st January, 1953, and he officiated in this capacity throughout the year.

(c) ANIMAL HUSBANDRY*Animal Breeding Farm, Jerudong:*

There was a marked improvement at the station during the year. An area of approximately 100 acres at the Forest region was

fenced up into paddocks in order to promote rotational grazing ground. Another portion of the farm has been let out to the labourers to grow padi for one season after which it is desired to grow suitable pasture grasses in the area. About 15 acres of jungle had been cleared during the later part of the year, 5 acres of which were planted with fodder grasses in view of the arrival of the Australian cattle.

During the month of April seven Bali cattle were purchased from Sarawak. Their health was found quite satisfactory during the year. Towards the end of the year six head of Hereford cattle (2 bulls and 4 cows) eight head of Illawarra cattle (2 bulls and 6 cows) and six heads of Saanan goats (2 bucks and 4 she-goats) were imported from Australia.

During the year poultry rearing was taken on a very modest scale with a view to study the suitability of site, and environment before plunging to a large scale. It is still doubtful whether the site is suitable or not. It is hoped in the year to come the area under poultry can be extended, subject to the area being proved suitable.

An electric fence was set during the year in the goat area. It is much too early yet to say whether it is a success.

The permanent buildings, i.e., Offices, milking parlour and cattle shades are in the course of construction and when completed should provide ample accommodation for the livestock at the farm.

A small vegetable garden was maintained during the year for the benefit of the workers on the station and any surplus being sold to the people outside the area at cost price.

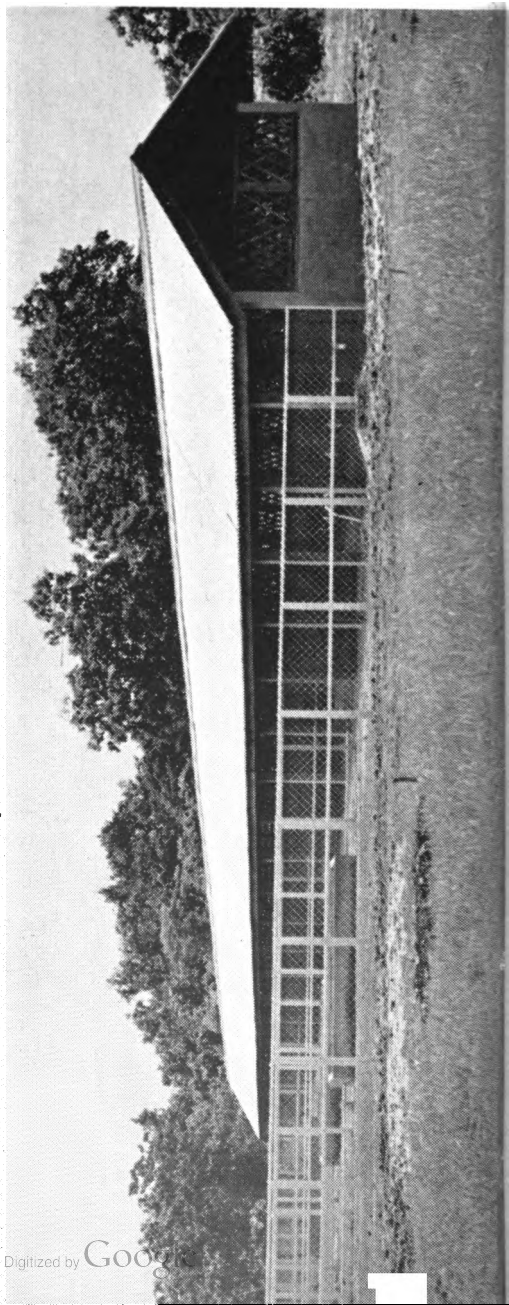
Resettlement Area, Bunot:

The scheme has shown a satisfactory result. The settlers showed keenness in farm work particularly poultry rearing. The fruit trees provided by the department thrived satisfactorily. The payment of house grant and family subsidy was terminated soon after their padi crops were harvested in April.



Budgrafting of Rambutan at the Agricultural Station, Kilanas.

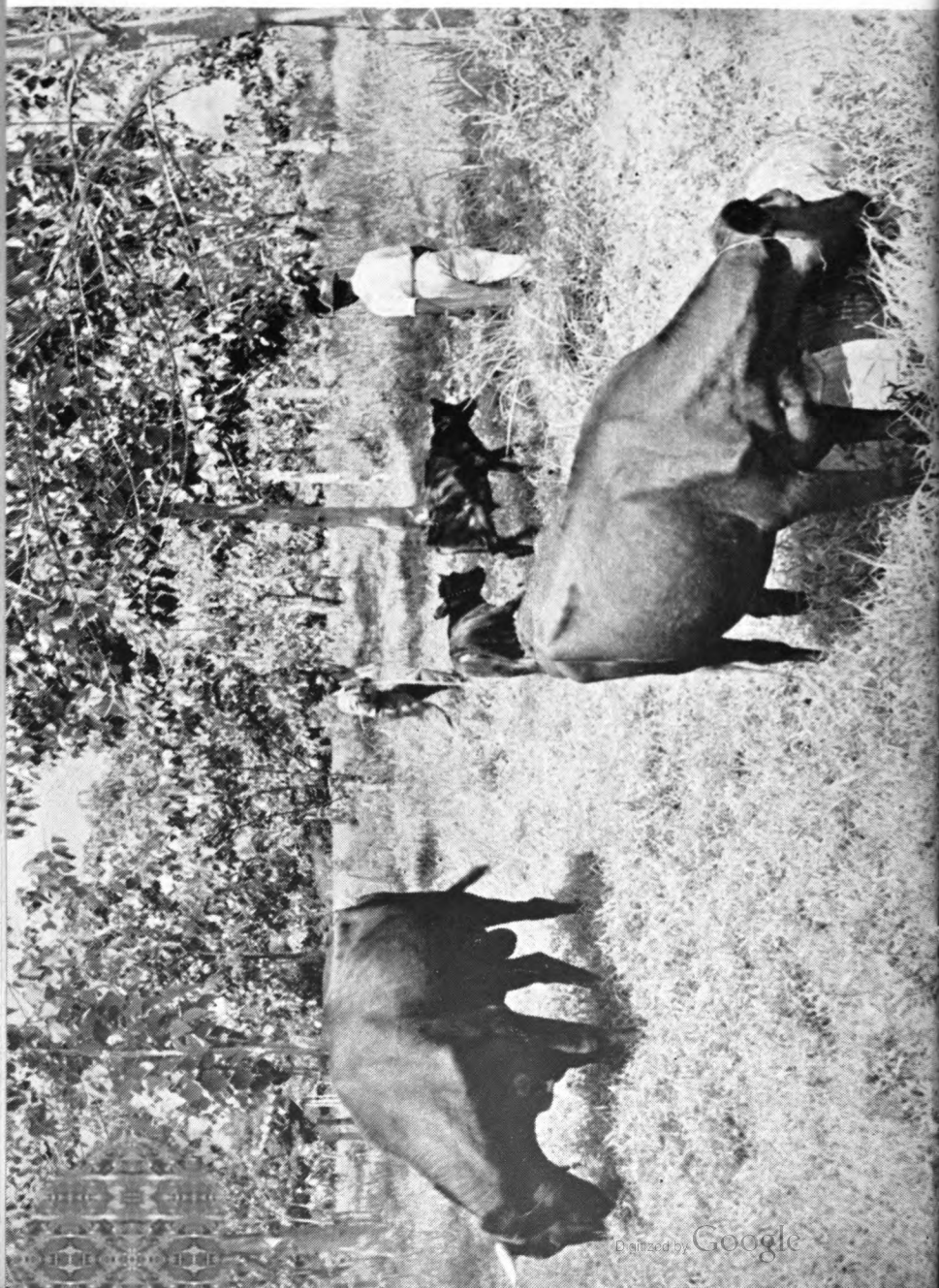
New Cattle Shed
at the Animal Breed-
ing Farm, Jerudong.



Office & Milking
parlour at the
Animal Breeding
Farm, Jerudong.



Illawara Cattle at
the Agricultural Sta-
tion, Kilanag.



A loan of \$8,000 was granted to the Ketua of the area for the purpose of rearing cattle. The animals were purchased from the Fifth Division of Sarawak.

LIVESTOCK

Cattle & Buffaloes:

At the end of the year the estimated number of cattle and buffalo was 1,350 head of cattle and 11,079 head of buffalo. Both figures showed an increase compared with the previous year. The health of the local animals in general was quite satisfactory.

Towards the end of the year 17 head of cattle, consisting of 4 Hereford cows and 2 bulls, 6 Illawarra cows and 2 bulls and 3 calves, arrived from Australia and were kept at the Government Animal Breeding Farm Jerudong. All the animals on arrival appeared fit and healthy until after 3 weeks one of the animals fell sick and died 2 days later. Owing to lack of the necessary veterinary equipment it was not possible to detect immediately the cause of the death. It was only after a week, when material obtained from the carcase, confirmed the fact that the disease was Haemorrhagic Septicaemia. Stained smears showed typical Bi-polar organisms, and a guinea pig inoculated with lung fluid died the following day and showed the typical haemorrhagic tracheitis. Heart blood from the guinea pig produced Bi-polar organisms in pure culture.

It is apparent that animals not indigenous to this country are susceptible to diseases which are known to exist here.

Goats & Pigs:

The return according to census was 812 heads of goats and 6,985 heads of pigs. There was a keen interest among the small-holders to rear goats, and during the year numerous applications for loans were received for the purpose of goat rearing. Three government-aided pig farms were maintained satisfactorily during the year.

Seven head of Australian Saanan milch goats arrived at the end of the year. All of these are kept at the Government Animal Breeding Farm Jerudong. Their health was very satisfactory.

Poultry:

The total number of poultry in the State was estimated at 59,200 a slight increase over last year's figure. No serious epidemic occurred during the year, and this was due to the continuous inoculation carried out by members of the department. During the year a total of 25,280 birds was inoculated against Ranikhet disease.

(d) FORESTRY

(Outturn figures for 1952 are given in brackets after the figures for 1953, and are to be taken as correct where they differ from the figure given in the 1952 annual report)

INTRODUCTION

Certain facts place the Brunei forest department in a unique position compared with others in the Commonwealth. These facts need to be emphasised at the start of this report because they are fundamental to an understanding of forestry in Brunei. They are:—

- (i) Freedom from pressure on the land. 80% of Brunei land is under high forest, of which 42% is forest reserve. 2,226 sq. miles of land is populated by under 50,000 persons.
- (ii) Freedom from pressure on the forest. The present cut is far below the potential cut on a sustained yield.
- (iii) Indifference to revenue. The State's revenues from the oil industry are such that there is no incentive to try and squeeze every cent from the State's forests. The idea is to conserve and develop the forests against the day when the oil wells start to run dry.

During the year, therefore, a 10-year development plan for all Brunei forests was drafted and submitted to the Government. After scrutiny and criticism by the Forestry Adviser to the High Commissioner, and by the Forestry Adviser to the Secretary of

State for the Colonies, this plan will be finalised and placed before the State Council. After approval it is proposed to distribute it in the same manner as this annual report, and therefore it is unnecessary to discuss it further here.

1. CONSTITUTION OF FORESTS

There are only two types of forest in the State, namely forest reserves (which are intended to form the permanent forest estate and to be kept under high forest in perpetuity) and State land forests (which will tend to disappear as the country is developed); there are no private or communal forests.

During the year the following areas were constituted as forest reserves:—

- (i) The Labu forest reserve (including the area originally proposed under the name of Silanjak forest reserve and mentioned in last year's report);
- (ii) The Peradayan forest reserve, an area of rich low-land dipterocarp forest.

A second extension of the Anduki forest reserve, consisting of about 250 acres of *kapor paya*, has been notified preliminarily.

2. MANAGEMENT OF FORESTS

Maps. An accurate topographic map on a sufficiently large scale is a pre-requisite for any form of land management and planning.

Hitherto the only accurate map available has been the 1" map of the coastal strip from Brunei to Seria, published by the Malayan Survey department in 1936. This map however covers only one of our major forest reserves (the Andulau).

Since the war the State has been covered by aerial photography, mostly by sorties flown in 1947 with gaps filled in later; the work was carried out by the R.A.F. under the direction of the Directorate of Colonial Surveys. Prints are kept in the forest office, and in the offices of the British Malayan Petroleum Co. in Seria.

To describe the difficulty of compiling an accurate topographic map from aerial photographs would involve too long a digression into the principles of photogrammetry; but a map in two dimensions (i.e. without heights or contours) can be compiled by using a slotted template machine, which fixes accurately the centre point of each photograph in relation to known triangulated points; details of natural features and forest type boundaries can then be transferred on to the map.

During the year slotted template plots have been prepared by the British Malayan Petroleum Co. for parts of the Temburong, Brunei and Tutong districts, and prints of these plots supplied to this office; these have been used as the basis for compiling stock maps of some of our important forest reserves.

In addition, copies of a more elaborate contoured map, covering the Labi Hills area, were received from the Company during the year; this map was compiled at the Hague from aerial photographs, with the help of an expensive plotting machine known as the Zeiss Autograph.

With the help of these maps and slotted template plots the following forest maps have been prepared during the year:—

- (i) Labi Hills forest reserve (northern section)
- (ii) Belait peat swamp forests
- (iii) Ladan Hills forest reserve (northern section)
- (iv) Peradayan forest reserve
- (v) All mangrove forests in Temburong district
- (vi) Labu forest reserve
- (vii) Andulau forest reserve (by enlargement of the existing topo map to photo scale, and then transferring detail from photography)

The Government of British North Borneo considered the preparation of forest maps of sufficient importance to justify the recruitment on contract from England of a specialist to do this work. Were it not for the co-operation of the British Malayan Petroleum Co. in making available to this department copies of maps and plots prepared for their own exploration work, it would be necessary to recruit a similar officer for Brunei. As it is, a large part of the State Forest Officer's time in office is spent on map work.

We are also indebted to the Director of Lands and Surveys, Sarawak, for duplicating these maps by photostat. A charge of \$1 per sq. foot is made for this service.

Enumeration surveys. The following enumeration surveys by the standard 1-chain wide linear transect system were carried out during the year:—

- (i) Completion of the survey of swamp forests along the true left bank of the Belait river between Sg. Rawai and Sg. Bang Tajok, in the Labi Hills forest reserve. This revealed some good stands of *seringawan* (var. *bunga*) and a good deal of rather worthless and unexploitable swamp.
- (ii) A corresponding but more restricted survey on the opposite side of the Belait river, between Sg. Meranting and Sg. Bauu. This revealed some very young stands of *seringawan*, possibly old Murut belukar areas.
- (ii) Survey of the swamp forest in the eastern part of the Labu forest reserve. This is primarily a jelutong forest, with a good stock of ramin towards the Sarawak border.

The information derived from these surveys was used in drawing up the 10-year development plan.

Management of State land forests. As explained earlier in this report, these forests will disappear in course of time; we are not therefore concerned with future generations of trees in them, but only with reaping the existing crop in an orderly manner. This is achieved by a system of licences; a tracing is attached to each licence showing the exact area to which it applies, and two licences are never issued for the same area—an up to date wall map is maintained in the office showing the distribution of all current licences.

Management of forest reserves. Detailed proposals are given in the 10-year development plan which it is not necessary to repeat here; but in general the object of management is not only to reap the mature crop but also to maintain and improve the forest for future generations.

3. SILVICULTURE

Silvicultural treatment after fellings is at present restricted to the Anduki forest reserve, where all unwanted trees are poisoned with sodium arsenite after extraction has been completed in a compartment; this work has not been carried out for some years, but 2½ compartments were dealt with in 1953, and it is hoped to work off the arrears in 1954.

In the mangrove forests of the firewood export working circle, the silvicultural system used is an initial stick thinning to promote regeneration, followed after an interval of 3 to 5 years by a final felling. As there is no market for anything under 4" diameter, a minimum girth limit system is probably better suited to local conditions; this is one of the points to be decided when drafting the working plan.

4. COMMUNICATIONS

The Labi road, under construction by the British Malayan Petroleum Co., reached Sg. Rempayoh during the year, and is being extended to a location near the summit of Bukit Teraja; it will be extended to Sg. Ridan in due course.

The Company also opened during the year a major road to the Lumut hills, near the north-western corner of the Andulau forest reserve; this was an extension of the existing road to the Sg. Tali water wells. This road may eventually be incorporated in the Seria-Brunei road, and will provide access to the Andulau forest reserve.

5. PROTECTION OF FORESTS

Maintenance of boundaries. The following work was carried out during the year:—

Andulau forest reserve. The boundary rentis all round the reserve was cleaned; missing plates were replaced.

Ladan Hills forest reserve. The rentis was cleaned as far south as Sg. Lengaban, and the section not previously surveyed was surveyed by chain and compass.

Labi Hills forest reserve. All notice plates along the Belait river were examined and replaced where necessary, and the Sg. Putit rentis cleaned to its end.

Forest offences. Twenty persons were convicted in the Tutong district court of felling high forest for padi cultivation without permission. The other offences were nearly all concerned with felling timber without a licence or permit.

6. FOREST INDUSTRIES

The four main forest industries in the State are:—

- (i) the timber industry
- (ii) the firewood and charcoal industry
- (iii) the jelutong industry
- (iv) the minor forest produce industry (rotans, leaf attaps, etc.)

An estimate has been made of the number of persons of various races employed in these industries, and is summarised in the following table:—

(i) Timber

		Malay	Dayak	Chinese	Others	Total
Brunei & Temburong						
Forest	...	35	5	5	46 Murut	91
Sawmill	...	7	4	5	4	20
Tutong						
Forest	...	146	79	24	—	249
Sawmill	...	64	6	21	2	93
Belait						
Forest	...	59	150	—	53	262
Sawmill	...	39	29	60	6	134
Total	...	350	273	115	111	849

(ii) Firewood and Charcoal

Brunei & Temburong	148	—	12	—	160
Tutong	39	5	—	—	44
Belait	12	—	1	—	13
Total	199	5	13	—	217

(iii) Jelutong

Brunei & Temburong	33	27	—	—	60
Tutong	... 25	7	—	1	33
Belait	... 18	77	—	2	97
Total	... 76	111	—	3	190

(iv) Minor forest produce (Form II)

Brunei & Temburong	132	3	14	2	151
Tutong	... 167	15	2	5	189
Belait	... 50	—	40	19	109
(Rotan form I)	... 6	—	—	20	26
Total	... 355	18	56	46	475
GRAND TOTAL	... 980	407	184	160	1,731

The Oil Field at Seria attracts large numbers of Dayaks (Ibans) from Sarawak; those surplus to the Company's requirements often find work as loggers or sawmill labour up the Belait river, and the timber industry in the Belait district is largely dependent on this source of labour.

Owing to high freight charges from Brunei ports to Labuan, and cost of transshipment there into ocean carriers, export is negligible. The industry concentrates on supplying the internal market, which is dominated by the 600 cubic tons per month (average) requirement of the British Malayan Petroleum Co. Reconstruction of war-destroyed shopping centres in Brunei, Seria and Kuala Belait, and the constructions of numerous Government offices and buildings also demands large quantities of timber.

Timber is produced by large numbers of small operators (nearly all Chinese); the industry is handicapped in competition with Sarawak and British North Borneo by the shortage and high cost of labour in Brunei, due to the abnormally large labour force employed in the Oil Field. A good deal of the timber used within the State is imported from these other colonies, (statistics are given later in this report).

The Company's buying policy is dictated by the fact that they have no timber preservation plant; an open tank for hot and cold creosotdiesel treatment has been constructed, but not yet

brought into operation. So for most engineering work they buy either heavy hardwoods such as *selangan batu* and *resak* or medium hardwoods such as *semayor* and *kapur*. Light hardwoods are taken for interior work. The prices they pay more or less control the timber market in the State, and held fairly steady during the latter part of the year at the following figures:—

			\$ per cubic ton f.o.b.
Selangan batu	...	...	300/-
Semayor, kapur bukit	...	...	170/- to 180/-
Meranti	...	...	110/- (includes "bunga")
Sepetir	...	...	95/-

Nearly 1/3rd. of all timber produced in the State came from the Anduki forest reserve, an area of pure *kapur paya* adjacent to the Oil Field. The burden of the reconstruction of the Oil Field has fallen upon this forest, which has been heavily exploited since 1946 and will be worked out in another year or two. It will then go out of production for some years, but the second rotation crop promises to be as rich as the original.

No sawmill may be installed without a permit from the Forest Department; such permits are always linked with a licence for a suitable forest area. There are 24 sawmills in the State, but many of these consist of a petrol engine (such as a Ford V8) or light diesel engine driving a 48" saw-bench, and move about periodically from one patch of State land forest to another.

All sawmills are powered by diesel or petrol engines, and all rely entirely on circular saws, both for breaking down logs and for re-sawing. None of them is either up-to-date in equipment or efficient in lay-out; the argument being that with spasmodic supplies of logs there is no object in having a good mill.

Poles. Owing to clerical errors, the outturn of poles given in 1951 and 1952 annual reports was incorrect, and the revised figures are given below:—

Year				Outturn in cubic feet
1951	...	...	...	96,814
1952	...	...	...	98,719
1953	...	...	...	84,970 (includes 47,123 c.ft. purchase by B.M.P. Co.)

For piling and scaffolding work mangrove poles are preferred, but for putting up temporary buildings in the Oil Field the B.M.P. Company buy large quantities of junglewood poles of mixed swamp species, cut in nearby forests.

Firewood.

(a) Mangrove. Production of mangrove firewood was 480,734 cubic feet solid (569,188 cubic feet). Of this total, 415,360 cubic feet was exported to Hong Kong by the George Ah Foott Firewood Co., or 15,855 shipping tons (17,895 shipping tons). The remainder was mostly used within the State for domestic firewood.

(b) Other. Production of firewood other than mangrove totalled 40,375 cubic feet (41,473); this is mostly used for firing brick kilns at Sengkurong and at Kampong Gana.

Charcoal. The industry is expanding, and there are 22 kilns (9) either built or under construction. These are small kilns of 25-30 pikuls capacity, unlike the Siamese type kiln used in Malaya which has a capacity of about 150 pikuls. Production for the year totalled 23,813 pikuls.

Jelutong. Production in 1953 totalled 1419 pikuls (1970).

Minor forest produce. Appendix "H" gives details of returns from minor forest produce. Though production is not large, the employment figures given in paragraph 6 show that these minor items provide at least part-time employment for many people, and a chance to earn some ready cash during slack periods of the farming year.

7. IMPORTS AND EXPORTS

A small quantity of ramin logs, cut in the swamp forests of the lower Belait river, was exported, 174 logs cubing about 100 tons going to the United Kingdom, and 370 logs cubing 205 tons going to Hong Kong. There were no other exports during the year.

Imports.

(a) *Belian attaps (shingles).* These are obtained from Bintulu, but owing to a shortage of belian the Sarawak Government has prohibited export except (as a special concession) to the Public

Works Department in Brunei for use on Government contracts. Imports totalled 211 laksas (one laksa=10,000 shingles); of which 124 came to Kuala Belait and 87 to Brunei.

(b) *Timber.* The British Malayan Petroleum Co. imported 2037 tons of timber from Sarawak, Sandakan and Singapore during the year. The Public Works Department imported 407 tons to Kuala Belait, including about 70 tons of graded *balau* posts from Singapore for use in the new police barracks (field force).

Imports into Brunei town included some 50 foot belian piles from Simunjan (Sarawak) for wharf piling, and teak flooring blocks and panelling from Siam for the new Government offices.

According to Sarawak statistics, exports from Limbang and Lawas to Brunei State totalled 93 tons of round timber and 2,568 tons of sawn timber during the year.

8. RESEARCH

Identification of our forest trees is the most important research item in Brunei; even some of our commoner timber-producing trees of the family Dipterocarpaceae have never been described botanically and have no scientific name. Hitherto our botanical specimens have been sent to the Forest Research Institute, Kepong, for study, but the number of specimens being sent at the present time from Borneo territories is over-taxing the Institute, and the writer therefore visited Kepong in June to discuss with the Forest Botanist and the Acting Director of Forestry how the work could best be carried on. Various alternatives have been suggested, but no solution had been found by the end of the year.

The opportunity was taken to examine all Brunei specimens in the herbarium. The Government Timber Yard in Kuala Lumpur and the Timber Testing Laboratories at Kepong were visited; the Forest School was seen at work in the forest; and personal contact was established with all research officers at the Institute, and with senior officers of the Malayan Forest Department in headquarters.

The two sample plots in *kapur paya* forest, Anduki forest reserve, received their annual measurements.

9. EDUCATION

As usual, Brunei sent one student to the Forest School at Kepong for the annual course of training. Forest Guard Salleh bin Daud passed 7th out of 58 in the final examinations, achieving credits in nearly all subjects, a good performance.

10. FINANCIAL RESULTS

A summary of revenue and expenditure for the year is given below:—

Year	Revenue	Expenditure		Total	Surplus
		Personal Emoluments	Other charges		
1952	109111	22527	26210	48737	60374
1953	116760	62021	23125	85146	31614

The increase in personal emoluments is partly due to the considerable increase in salary scales for forest staff introduced by Government with effect from 1st January, and partly due to the presence of a State Forest Officer throughout the year (half of his emoluments however is paid by Sarawak).

Details of revenue from different classes of produce are given below:—

Kind of Produce	Revenue		Increase or Decrease
	1952	1953	
Timber and poles ...	52387	74027	+ 22640
Firewood and charcoal ...	24434	20820	— 3614
Minor forest produce ...	31929	21793	—10136
Miscellaneous ...	67	105	+ 38
Compensation & fines ...	294	15	— 279
	109111	116760	+ 7649

There was a drop of nearly \$4,000 in revenue from leaf-attaps (nipah and rumbia); this is attributed to the fact that the construction of temporary buildings with leaf-attap roofs has

decreased very sharply, nearly all buildings now being of a permanent type.

Royalty on jelutong for 1953 was \$22,673 and the drop of over \$5,000 is due to the drop in production, the average royalty per pikul (calculated on the Singapore buying price) being almost the same as last year.

11. ADMINISTRATION AND GENERAL

Mr. B. E. Smythies, Assistant Conservator of Forests, held the post of State Forest Officer throughout the year, in addition to the post of Section Forest Officer, Limbang and Lawas.

The staff of the department at the end of the year consisted of:—

- 1 State Forest Officer
- 1 Chief Clerk
- 2 Assistant Clerks
- 2 Forest Rangers
- 7 Foresters
- 11 Forest Guards
- 7 Forest Labourers
- 1 Boatman/Driver
- 1 Office Peon

The death of one forest guard, Sabli bin Mohammed, is recorded with regret. He was taken ill suddenly in his headquarters at Bangar, and although removed to the hospital in Brunei without delay he could not be saved; the illness was not diagnosed.

After several years of negotiation, the Government of Sarawak approved revised salary scales for the forest staff, and the Government of Brunei then adopted the same scales. From being the lowest paid of civil servants the forest staff now receive salaries more in keeping with the hard work, integrity and intelligence required of them.

1953 must be recorded, without complacency, as a year of good progress; with adequate funds and the loyal co-operation of

all ranks of the staff, a heavy programme of exploration, demarcation, maintenance, and silvicultural improvement was carried out according to plan.

(e) FISHERIES

The principal fishing areas of the State of Brunei are mostly coastal and in the vicinity of river mouths and estuaries, where the fishermen operate close inshore on rocky patches or coral beds.

The prawn fishing industry with its headquarters on the Islands of Baru Baru and Berbunot, is centred around the Southern part of Brunei Bay where numerous fishing stakes and nets (Tugus) are to be seen extending from the Southern shores to 9 miles out, and practically right across the bay from West to East, leaving clear only the navigable channels of the Brunei, Limbang, Temburong and Pandaruan rivers.

A small number of fish traps (Kilongs) and set lines are to be found well up the rivers, but the returns from these methods being so small as to be negligible, they are operated for the personal consumption of the owners only and not on a commercial basis.

Methods of fishing, and gears used by the Brunei fishermen vary slightly with the seasons. Tables are given below showing the total of various fishing methods licensed during the year, figures for previous years being given for comparison.

<i>Method</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>Explanation</i>
Pukat	21	29	8	24	Small Drift net.
Rantau	43	23	19	14	Large Drift net.
Kilong	102	46	11	107	Deep water fishing trap.
Paguyot	12	18	10	3	Drag net.
Kabat	7	16	13	24	Small fish trap.
Bubu	9	330	123	55	Similar to lobster pot.
Tambak	5	42	21	10	Set net.
Lintau	11	120	90	58	Shoal water fish trap.
Slambau	14	11	13	3	Watched set net.
Penakat	—	35	41	40	Line fishing.
Rambat	—	21	—	7	Cast net.
Gurit	—	1	19	10	Long line.

These totals are for the whole of the State, but a breakdown of fishing gear and boat licences shows Brunei Town area to possess the largest fishing community.

			<i>Gear Licences</i>	<i>Boat Licences</i>
Brunei Town ...	...	...	93	92
Baru Baru ...	...	...	75	44
Kuala Belait ...	...	...	69	22
Tutong ...	...	...	19	19
Kuala Labu ...	...	...	69	76
Muara ...	...	...	71	32
		Total	<u>396</u>	<u>285</u>

In Brunei Town these licensed gears and fishing boats produced between them a total of 2,853.83 pikuls of fish and prawns during the year. Of this total 589.38 pikuls were fresh prawns landed and sold in the Brunei Town market. This figure is approximately 50% of the total catch of prawns, the balance of which are sun-dried and powdered on the two islands of Baru Baru and Berbunot.

Catches of fish and prawns landed in Brunei are for consumption within the State, and there is no export of these commodities. The State of Brunei does not have a Fisheries Department, control and supervision of the industry is done by the Marine Officer, the Headman of each individual fishing community being responsible to this officer for the Fishermen's harvest. Distributions being in the hands of a limited number of licensed Towkays (dealers). Controls are exercised over movements of fish and prawns within the State, and a price control is rigidly enforced.

Government financial assistance to purchase boats, outboard engines and gear is given on security, and encouraging returns have resulted from this policy of assisting the native fisherman to mechanize his craft and develop his methods.

(f) MINING

Production of crude oil from Seria field by The British Malayan Petroleum Company Limited averaged 100,000 barrels per day during 1953, compared with about 101,000 barrels per day in 1952. Total output for the year was 36,496,559 barrels compared with 37,892,006 barrels in 1952.

The oil is of two main types: a light, waxy oil of specific gravity 0.83 and a heavy, non-waxy oil of 0.95 specific gravity. Seria crude is especially suitable for the manufacture of certain types of aviation gasoline and is mainly shipped to Australia, Japan and Indonesia.

Drilling operations were continued throughout 1953, and of 31 new wells completed 27 were oil producers, the remainder being non-productive. Footage drilled during the year was 168,910 compared with 165,616 in 1952.

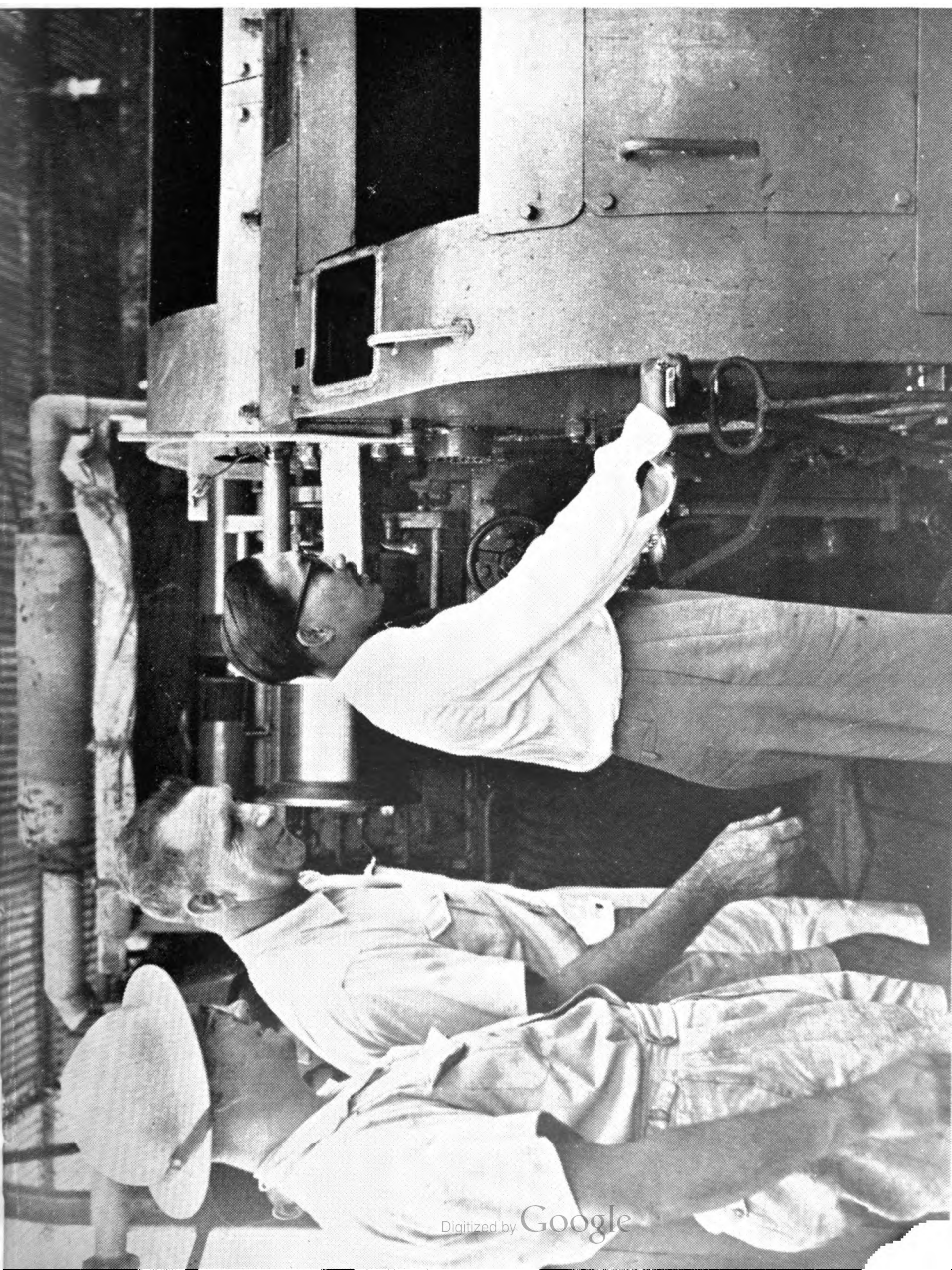
Drilling and producing operations were seriously interrupted during April and May by a blow-out of high pressure gas which took place when a deep test well was being drilled in the centre of the oilfield.

Exploration work was carried on outside the Seria field area. Geological field work was done in the Labi area, but the main effort consisted of exploration drilling. A deep test well, Rasau 4, was drilled to 10,705 feet two miles south of Kuala Belait, but no gas or oil was found. Two deep test wells were begun on the Belait anticline about 15 miles south-east of Seria. Both were still being drilled at the end of the year. About 15 miles of access road was built in connection with this programme. The road starts at Bukit Puan, on the Belait River, and leads to the agricultural district at Labi.

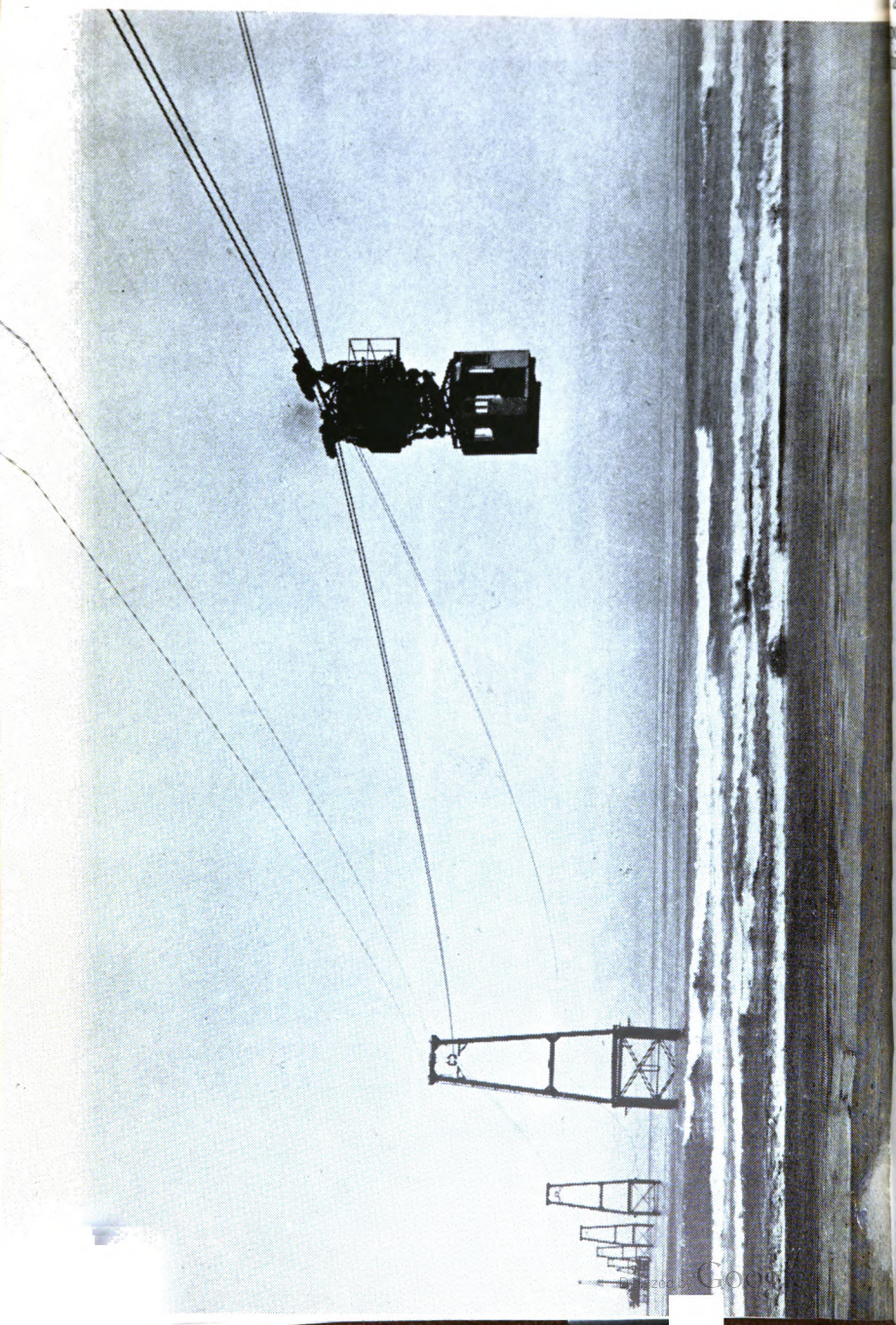
Apart from these exploration activities, drilling was also carried out off the coast at Seria from a specially-constructed marine platform located about a mile offshore and serviced by an aerial ropeway from the land. More marine drilling platforms of this type are to be erected in 1954 in order to continue this search along the whole coastline at Seria.

An earth road was constructed through the jungle from Tali to the Lumut Hills, in preparation for the start of work in early 1954 upon the construction of a clay "dyke" to combat erosion around the coastline of Seria. Earth-moving machines are to transport clay from Lumut to build a brick-faced clay wall about six miles long to prevent the sea's encroachment into the oilfield area.

H.H. the Sultan
at the controls of
the draw-works of
Seria's drilling loca-
tion.



A view of Series
marine drilling loc
tion.



In 195
sed con
at the
orary
his natu

In 1952 and previous years the high tides of December caused considerable coastal erosion, but in 1953 (owing to calm seas at the time the tides reached their maximum, and to extensive temporary protective measures) the oilfield experienced no trouble of this nature.

Chapter VII.

SOCIAL SERVICES

(a) *Education:*

ONE of the most encouraging and pleasing features of the year under review is the substantial increase shown in the number of children attending schools. The total increase was 882, and increases are recorded in the enrolments of all types of schools. They are: Malay schools, 411; English schools, 274; Chinese schools, 197. The increase in the Malay schools is particularly gratifying as it considerably improves the percentage of Brunei's indigenous children attending vernacular schools.

The total enrolment in all schools (excluding students and apprentices in the British Malayan Petroleum Company's Trade School) as at 30th November, 1953, was 5,917; 4,168 boys, 1,749 girls. Individual totals were: Malay schools, 2,679-2,143 boys, 536 girls; English schools, 1,511-967 boys, 544 girls; Chinese schools, 1,727-1,058 boys, 669 girls. For a clearer and more detailed picture of the respective increases readers are referred to the tables farther on in this report giving the individual enrolments of all schools in their separate categories.

The low ratio of girls to boys in Malay schools is still very marked, and shows that the reluctance on the part of Brunei Malay parents to the sending of their female children to school—commented on in last year's report—still persists. The small gain of about a hundred in 1953 is, of course, encouraging; but when one remembers that population figures show that boys and girls in the school-age are about equal in numbers, the situation leaves much to be desired and gives cause for some concern. It calls, in fact, for immediate and active measures on the part of the Religious and secular leaders of the Malay community to break down and eradicate this reluctance which it may be said, deprives the State of more than a third of the Educational Potential of its

rising generation. The reluctance referred to does not unfortunately affect Malay schools only, but English schools as well. Very few Malay girls enter English schools from Malay schools even though every opportunity and encouragement is given them to do so. This, it may be said, is not only due to the fewness of Malay girls available, i.e., those who remain on until they have passed Primary IV in a Malay school and thus qualify to enter transitional classes in a Government English school; but also to the fact that some parents, even though their children are selected, refuse to allow them to carry on with their education.

The following figures, showing the number of Malay girls in English schools, reveal the situation more explicitly and should convince those who have the interests of their country at heart that something should be done and, be it said, done quickly. It might be added "before it is too late", because even if steps were taken immediately to increase the number of Malay girls in Malay schools, several years must elapse before any effective or beneficial results accrue. The figures are:

Number of Malay girls (indigenous and immigrant)	
in Brunei English schools	65

Number of girls of other races in English schools	
(the majority of whom are immigrant and domiciled Chinese)	479

The number of institutions which provided educational facilities during 1953 was 47. They fall into four main categories:

(a) Malay Vernacular Schools—34 schools. Wholly maintained by Government Funds.

(b) English Schools:

(1) Government English Schools—2 schools. Wholly maintained by Government Funds.

(2) Catholic Mission Schools—3 schools. Maintained by school fees; by funds put up by the Mission; and by Grants-in-aid from Government. Two schools,

one in Seria and one in Kuala Belait, receive financial aid from the British Malayan Petroleum Company because they cater for the children of the Company's immigrant Asian employees.

(3) The British Malayan Petroleum Company's Kindergarten and Preparatory School. This is maintained by the Company and caters mainly for the children of the Company's senior staff. School fees are charged.

(c) Chinese Vernacular Schools—7 schools. Maintained by schools fees; by subscriptions from local Chinese, and by grants-in-aid from Government. Two schools situated in the Seria—Kuala Belait area also receive financial aid from the Oil Company because they cater for the children of its Chinese employees.

(d) The British Malayan Petroleum Company's Trade (technical) School. Wholly maintained by the Company.

All non-Government institutions in the above list are required to register under the Education Enactment, No. 2 of 1952; which also requires all teachers, supervisors, and members of school committees to apply for and obtain Certificates of Registration from the Director of Registered Schools. The State Education Officer is, ex officio, the Director of Registered Schools.

Malay Vernacular Schools:

All Malay Vernacular schools, except in the first instance when villagers erect their own, are built, staffed, equipped, and administered by the Education Department under the direction of the State Education Officer, who is assisted by a Superintendent of Malay Education, an Inspector of Malay Schools, and five Supervisors. Three of the latter are general supervisors, each being in charge of a Division or District; the other two are specialist supervisors, one for Home and School Gardens, the other for Handicrafts and Drill and Games. The two latter are not appointed to any particular district; they cover the whole State. Supervisors spend most of their time in the 'field' and they visit most schools, except those in very remote places, at least twice a

month. Between them they cover all schools and the particular subjects for which they are responsible. Conferences are held in the Education Office twice a month, and are attended by all administrative officers. These conferences ensure, as far as Malay schools go, that a unified policy is maintained, and keep the State Education Officer in touch with the schools. Schools are also visited by the three senior officers. The State Education Officer visited all schools at least once during the year.

A list of all Malay schools, together with their enrolments for the years 1952 and 1953 is given below:

School	1952			1953			Increase or Decrease
	Boys	Girls	Total	Boys	Girls	Total	
BRUNEL, MUARA & TEMBURONG DISTRICTS.							
1. Sultan Mohamed Jamalul Alam School (Brunei Town) ...	495	92	587	571	118	689	102
2. Lela Menchanai ...	—	—	—	152	18	170	170
3. Kilanas ...	40	10	50	44	14	58	8
4. Sengkuring ...	59	12	71	60	11	71	—
5. Gadong ...	42	—	42	46	1	47	5
6. Berakas Estate ...	31	2	33	30	5	35	2
7. Sungai Hanching ...	47	3	50	46	3	49	1
8. Muara ...	43	30	73	53	24	77	4
9. Lumapas ...	39	7	46	47	8	55	9
10. Kasat ...	11	—	11	20	4	24	13
11. Baru Baru ...	36	6	42	35	5	40	2
12. Bangar ...	63	17	80	60	13	73	7
13. Bokok ...	37	8	45	40	10	50	2
14. Biang Estate ...	15	5	20	13	5	18	5
15. Puni ...	51	8	59	45	8	53	6
16. Batu Marang ...	38	14	52	32	18	50	2
17. Dato' Gandi ...	32	7	39	38	10	48	9
BELAIT DISTRICT.							
18. Kuala Belait ...	108	55	163	117	63	180	17
19. Seria ...	142	35	177	144	44	188	11
20. Kuala Balai ...	18	9	27	10	3	13	—
21. Labi ...	37	8	45	41	10	51	6
22. Bukit Sawat ...	32	—	32	31	—	31	1
23. Sungai Liang ...	19	16	35	26	15	41	6
TUTONG DISTRICT							
24. Bukit Bendera ...	51	21	72	53	27	80	8
25. Penanjong ...	23	3	26	34	7	41	15
26. Keriam ...	25	8	33	29	13	42	9
27. Sinaut ...	40	3	43	59	13	72	29
28. Kiudang ...	58	14	72	61	15	76	4
29. Lamunin ...	68	5	73	54	11	65	—
30. Tanjong Maya ...	50	8	58	54	19	73	15
31. Ukong ...	43	9	52	34	7	41	—
32. Danau ...	35	5	40	41	6	47	7
33. Tumpuan Telisai ...	20	—	20	23	8	31	11
	1848	420	2268	2143	536	2679	+411

It will be noted that the Brunei Town area, in which, incidentally, the River Kampong Malay School is situated, accounts for more than half the total increase in enrolment. In other places, however, though increases are not perhaps as spectacular, in proportion to their enrolments and considering their location (they are mostly up-country schools) they are, comparatively speaking, substantial. Noteworthy are Kasat—a school in a small well-hidden village well off the beaten track—showing an increase of 65%; Penanjong—also a school in a small upcountry village—an increase of approximately 50% Tanjong Maya—approximately 28%; Tampuan Telisai—approximately 44%.

The phenomenal increase can be attributed to two main factors (a) the opportunity afforded by the linking of the Malay and English educational systems, whereby a substantial number of pupils who pass Primary IV in a Malay school are selected annually to enter transitional classes in a Government English school, and the introduction of English as a second language in Primary IV in Malay schools. It may be of interest to mention that in respect of the first reason given above, the two systems are not merely linked physically in that the one follows the other in point of time and sequence, the individual curriculums of each system have been dovetailed into one another so that academic continuity is assured from the moment a child enters a Malay school. In fact, the concatenation of the two systems provides an unbroken ladder for those who aspire and are able to climb it, from the lowest class in a Vernacular school to the threshold of a University.

There are opportunities also as a result of the introduction of English for those who are not capable of climbing to the highest rung. Provision has been made and will be expended as rapidly as possible for those who drop off on the way up the ladder; both for those who drop off at the level of Primary V or VI in a Malay school, and those who drop off at the secondary stage in English schools. From the angle of Malay schools, it is hoped to stream off those who remain on and pass Primary V into separate academic and technical streams. Those in the academic stream would undergo, when suitable teachers are available in sufficient numbers, a higher course of Malay studies wherein the study of the Malay language would be prominently featured. Such would be

trained for posts which require a more advanced knowledge of Malay and its literature, e.g., as Malay Vernacular School teachers; for Government posts which require a higher knowledge of Malay, such as Grade 'A' clerks and Malay Writers. Students in this stream who showed exceptional ability could probably be sent to appropriate institutions overseas where in the Malay language receives special attention. Those in the technical stream would receive vocational training in Primary VI, which would fit them to enter as trainees for medium grade technical posts in the various Government Departments such as Public Works, Marine, Survey, etc. It should perhaps be emphasized here that English as a second language would continue to be taught to both streams. The importance of this is, that eventually trainees in the technical stream would reach a sufficiently high standard in English to permit them to receive tuition and training using the language as the medium of instruction.

The Curriculum in Malay Schools:

Malay schools teach the usual academic subjects including reading and writing in both the Romanised and Malay-Arabic scripts. English is taught as a second language in a number of schools, beginning in Primary IV. It is not, however, taught in all schools because there are not sufficient teachers available. Religious instruction is given by special religious instructors.

The main aim of Malay education is to spread literacy among the children of Brunei's indigenous population in both the Romanised and Malay-Arabic scripts. Literacy in the former is essential because the Romanised script is common to both the Malay and English schools and is the link between them; literacy in the latter is essential because it is the script in which the Holy Koran is written. Other important aims are: to give the children a grounding in essential 'scientific' subjects like arithmetic, physiology, and hygiene (theoretical and practical), agriculture (theoretical and practical), geography (political, physical, and commercial); cultural subjects such as Malay history and literature, language study (Malay in lower classes, Malay and English in the higher ones); art, including drawing, painting, artistic crafts. Great emphasis is placed on practical and utilitarian pursuits such as gardening, physical training, games and athletics, and handicrafts, especially handicrafts in connection with Brunei's traditional and

domestic industries. Briefly, the aim is to give an education which may be termed a liberal or all-round education, which caters for the spiritual, moral, mental, physical, vocational, and recreational needs of local children.

Staffing—Malay Schools:

A comparison of the staffing position for the years 1952 and 1953 is given below:

Comparative Tables Malay School Teachers 1952 and 1953

					1952	1953
1.	Trained Teachers (Men)					
	(a)	Trained S.I.T.C.	...	...	25	27
	(b)	Trained Batu Lintang	...	...	19	31
2.	Trained Teachers (Women)					
	Malay Women's Training College,					
	Malacca	...	...	...	3	3
3.	Untrained Teachers					
	Men	...	...	...	26	22
	Women	...	...	...	3	4
4.	Probationers					
	Men	...	...	...	40	51
	Women	...	...	...	4	5
5.	Temporary Teachers					
	Men	...	...	...	14	14
				Total	134	157

It will be noticed that, although the increase in the number of men teachers is substantial, the increase in the number of women teachers is negligible. The shortage of women teachers is of course bound up with the reluctance already referred to on the part of Malay parents to send their daughters to school, and with the reprehensible practice of removing them when they reach Primary III or IV. The fact that there was a gratifying increase in the number of girls attending school in 1953 does not unfor-

tunately improve our immediate prospects in the urgent matter of obtaining more women teachers. In fact, no quick relief can be expected, but it is likely that four girls who passed Primary V in December will become teachers. But even if they do, two will probably proceed overseas for training towards the middle of 1954; the actual gain is therefore again small.

As far as men teachers are concerned, there is no likelihood of a shortage, as there is a marked increase in the number of boys who remain on in school until they have passed Primary V (the minimum qualification required for those who wish to become teachers), and even Primary VI. There should therefore be no dearth of recruits.

The number of teachers undergoing training overseas during the year was 23. They were attending the undermentioned training institutions:

Sultan Idris Training College, Tanjong Malim, Federation of Malaya	4
Malay Women's Training College, Malacca, Federation of Malaya	2
Batu Lintang Training Centre, Kuching, Sarawak	17
Total	<u>23</u>

In connection with the training of teachers it has been decided, as a measure to raise the ratio of trained to untrained teachers, to increase the annual quota of students to the Batu Lintang Training Centre from 10 to 20. It has also been decided to extend the duration of the Training Course from two to three years. These changes will be introduced immediately and 20 trainees have been selected to proceed to Kuching at the end of January 1954. The main reason for lengthening the course was to allow for the introduction into it of a greater amount of Malay studies which will include such subjects as Malay language, Malay literature (historical, mythological, and cultural), and a greater number of subjects will be taught using Malay as the medium of instruction. A Brunei Malay schoolteacher who has specialised in the Malay language and language study generally has been seconded to the Training Centre as the instructor. This extension of the course should prove of great value to Brunei

trainees. It is hoped to augment the number of instructors by recruiting another trained and qualified Malay teacher from Malaya as soon as possible. If this is possible it would tend to bring the level of the Batu Lintang course more in line with training courses in Malay teacher training colleges in the Federation of Malaya.

Medical Attention in Rural Schools:

Medical attention and services in Malay schools were stepped up during 1953. More schools were included in the itinerary of travelling dressers and individual schools were visited more often. No epidemics during the year affected school attendances.

The outstanding contribution of the Medical Department during the year in connection with the health and wellbeing of school children was the introduction of a School Feeding system with the intention of providing all school children with one substantial cooked meal a day. The scheme was initiated and organised by the Medical Department, and began to operate in the first instance in November as a pilot scheme in those schools within easy distance of Brunei Town which was the distributing centre. The scheme was found workable and even before the end of the year nearly all schools in the Brunei District were receiving meals regularly. Plans are now being made to introduce the scheme on a State-wide basis in 1954, and a meal a day will be provided for all school children in all schools, Malay, English, and Chinese. Those responsible for launching the scheme are worthy of high praise, especially the State Medical Officer and the Hospital Sister who 'put it over'. A measure of praise is also due to those members of the Education Department whose co-operation smoothed the path of the scheme's introduction into the schools.

Throughout the year teams of W.H.O. Doctors and Nurses visited all schools and gave B.C.G. inoculations. A survey of the incidence of malaria in upcountry places was also carried out by a Medical Officer of the same organisation. In 1954 it is hoped to begin a dental survey amongst school children. The new Government Dental Officer will carry it out. All medical visitors, especially to the rural schools, commented on the ready and enthusiastic assistance given by school staffs.

In conclusion it may be said that schools—especially rural schools—are making a real contribution to the expansion of Medical Services in the State. Schools are being used more and more as focal points in the Medical Department's campaign to spread its scope and effectiveness. School staffs have their place in this valuable and far-reaching effort and they are more than willing to do their utmost to help the campaign forward. They regard it as one of the most important factors in the process of education. The Medical Department may feel assured that ready and willing co-operation will always be forthcoming.

English Schools:

A list of the Brunei English schools, together with their enrolments for both 1952 and 1953 follows:—

Schools	1952			1953			Increase or Decrease
	Boys	Girls	Total	Boys	Girls	Total	
1. Catholic English School, Brunei Town	130	52	182	126	74	200	18
2. Catholic English School, Kuala Belait	133	89	222	119	65	184	—38
*3. Catholic Anglo-Chinese School, Seria	402	249	651	523	315	838	187
4. Panaga School, Seria	64	53	117	86	69	155	38
*5. Government English School, Brunei Town	35	6	41	79	13	92	51
6. Government English School, Seria	17	7	24	34	8	42	18
Total	781	456	1237	967	544	1511	+274

*Schools so marked have Secondary Forms. All the others are Primary schools.

Both Government and Aided English schools continued to experience staffing difficulties throughout the year; a condition which, if one refers to previous Annual Reports, appears to be chronic as touching these particular schools.

As far as Government English Schools are concerned, the chief difficulty is connected with recruitment of teachers suitable in all respects for our requirements, which means teachers not only qualified scholastically but well balanced in mind, character, and habit. Preferably they should be young and eligible for em-
placement on the permanent establishment because, for the sake of the tradition, continuity and esprit de corps of our schools, the majority of their individual staffs should be permanent teachers. Attempts to secure suitable recruits from neighbouring territories (there are none available locally) were made throughout the year, but without much success.

The fact is that at present, owing to the expansion of English education going on all round us, there is a great shortage of trained English school teachers in South East Asia. Several territories are now engaged in speeding up the opening of training colleges; but no great flow of trained teachers can be expected from them for some time to come. But even so, the circumstance will not help Brunei to any extent; as naturally the territories which train their own teachers lay claim to their services on the completion of their training. In fact, in these territories, would-be trainees have to give an undertaking to serve in "local schools" before they are accepted for training.

To break out of this impasse, however, plans have already been made for Brunei to extend the area from which it is hoped to attract suitable recruits, even going as far as the United Kingdom. Nine posts for such recruits have been provided in the 1954 Establishment lists. Included in the posts are a number of specialist teachers. If all these posts can be filled the outlook for English education in Brunei will be very bright indeed, and its rapid expansion assured.

School Buildings:

All English Schools, except the Oil Company's Preparatory School which moved into a new building during the year, are still housed in temporary and unsuitable buildings. The hope ex-

pressed in last year's report that the building of at least two new English schools would commence during 1953 did not materialise. The causes of the delay, however, were beyond the control of the authorities concerned, and they have now been overcome. Building should therefore begin very soon, probably about the middle of 1954. In fact, building should commence on three large English schools round about that time, namely, the Government English School, Brunei Town, the Government English School, Seria, and the Catholic Anglo-Chinese School, Seria. All these schools will be double-storied permanent buildings and individually will provide accommodation for about 500 pupils. The Brunei Town Government English School and the Catholic Anglo-Chinese School, Seria, will both have hostel accommodation for out-station students. If all three schools are ready for occupation early in 1955, and there is no reason why they should not be, 1955 will be a momentous year in Brunei's history; it will mark the end of the post-war struggle to set up and establish English education, and the beginning of the era of unbounded educational development and progress. It will also be a momentous year for those who have been intimately identified with the struggle, in that their labours will have been crowned with success.

Adult Education:

This is included under the section having to do with English schools because English is the most popular and sought after subject among adult students. The demand for adult classes in the English language was well maintained during the year under review, and both the number of classes and the students enrolled increased. Altogether there were 16 classes, with a total enrolment of 335 students. Six of these classes were sponsored by the British Malayan Petroleum Company, and ten by the Education Department. Classes were held in the evenings three times a week in Brunei Town, Seria, and Kuala Belait.

For the first time in the history of these adult classes, a number of female students were enrolled. In one class—a class of probationer nurses—the students were all female. In all, 41 female students were enrolled. As in previous years, an outstanding feature of these classes was the high percentage of attendance which, it is considered, not only reveals the keenness and enthusiasm of those who make use of them to learn English, but also

reflects great credit on the instructors who make the classes attractive and thus maintain the students' interest. It is perhaps interesting to note that a good number of these adult students have been attending the classes for two or more years. Many of them knew no English when they joined them originally.

In conclusion, it may be mentioned that these adult classes have great potentialities, and if the Department is able to recruit the number and types of English teachers for which provision has been made in the 1954 Estimates, their scope can be considerably enlarged to include classes for teaching cultural and scientific subjects to those students who have now reached a sufficiently high standard in English. The opening of the new English schools mentioned in the preceding section of this report will greatly facilitate such development, for, as far as the new Government schools are concerned, they will become the venue of all Government-sponsored evening classes and will not only provide the necessary classroom accommodation, but also the instructors, textbooks, equipment, and apparatus.

The British Malayan Petroleum Company's Trade School:

This has two divisions, (a) a Preparatory Trade School and (b) a Technical Trade School.

The Preparatory Trade School caters for boys whose standard of general education needs improving to enable them to enter the Technical Trade school. The main stress in the Preparatory school is on English and Mathematics. There were 41 students in this division in 1953.

The Technical Trade School is a three-year apprenticeship course. In 1953 the first year enrolment was 44, made up of 20 Chinese, 12 Malays, 10 Dayaks, and 2 Indians. In the second year were 30 students, made up of 23 Chinese, 6 Malays, and 1 Dayak. In the third year were 22 students, 12 Chinese, 9 Malays, and 1 Dusun. The Technical Trade School gives practical instruction in fitting, turning, motor and diesel mechanics, welding and blacksmithing; on the theoretical side there is instruction in the theory of mechanics, workshop practice, electricity, mathematics, and machine drawing. During the first year apprentices

do a full time school course divided between the classroom and the school workshops. In the second and third years 70% of the time is spent in the Company's workshops and 30% in the classroom.

The Company has always been anxious to attract to its apprenticeship scheme boys from the Brunei English Schools, but so far it has not been able to do so in any great numbers because these schools had not reached the stage in their development to provide candidates having secondary school qualifications, and the practice has been to seek suitable candidates in the neighbouring Borneo territories. The necessity to do this, however, no longer exists, as there should be an ample supply of local boys from now onwards. In fact, the time is not far distant when the Company will be able to obtain a fair number of recruits for its regional staff from our local English schools; two of which now have secondary forms. One will have a Secondary V in 1955 (Cambridge School Certificate Form), another will have Secondary III which is equivalent to the old Standard VII.

In concluding this English School section, which constitutes the most important and vital section of all Brunei's scholastic enterprises, a word of encouragement is extended to school staffs which have laboured under great difficulties during the year. There have been shortages of staff, schools have been housed in temporary, makeshift, unsuitable and inadequate buildings; circumstances which not only retard the progress of the scholars but make the task of the teacher very trying. It is not possible, it may be said, to create and build up a proper school spirit under such conditions. On the teachers' part, the difficulties enumerated above beget the constant need to temporise, compromise, and improvise to deal with situations arising therefrom, which, in the nature of things, do not always prove efficacious and successful, and a feeling of frustration and disappointment ensues. A high degree of patience is often required to combat and defeat these feelings; but still, encouragement can be derived from the knowledge and conviction in oneself that one has made the best and fullest possible use of the "tools and implements" provided; and also from the knowledge that the time is not far distant when the major difficulties will be disposed of.

Chinese Vernacular Schools:

A list of Chinese schools showing their enrolments for both 1952 and 1953 follows:—

Schools	1952			1953			Increase or Decrease
	Boys	Girls	Total	Boys	Girls	Total	
1. Chung Hwa School, Kuala Belait	334	202	536	366	215	581	45
2. Chung Hwa School, Brunei Town	238	146	384	287	166	453	69
3. Chung Cheng School, Seria ...	265	222	487	308	238	546	59
4. Chung Hwa School, Labi ...	41	7	48	42	19	61	13
5. Pai Yuek School, Bangar ...	13	12	25	10	8	18	—7
6. Chung Hwa School, Tutong ...	22	3	25	25	17	42	17
7. Chung Hwa School, Kiudang ...	19	6	25	20	6	26	1
Total ...	932	598	1530	1058	669	1727	+197

It will be noted that practically all Chinese schools showed an increase in their enrolments over the previous year. The substantial total increase of 197 pupils in 1953 is the largest recorded for several years.

In respect of Chinese schools, the outstanding event of the year was the opening of the new school premises to house the Chung Ching School, Seria. The building is a semi-permanent one and is built on a site given to the school by the Brunei Government. The School Committee are deserving of great praise for their achievement in completing this far-reaching enterprise which has been their foremost ambition and purpose for several years. The staff and pupils should be very proud of their new 'habitat'. It will make possible a new era of educational progress and expansion which could neither be contemplated nor achieved in the old Kajang premises just vacated. As with English schools, Chinese schools have staffing difficulties also. They are not however all connected with a shortage of suitable teachers; but also with a seeming restlessness among Chinese teachers which leads them to follow itinerant habits, with the result that they do not remain in any one particular school for any effective period. Such itinerant habits render the running of any education establishment a doubly difficult task and it is a moot point whether an actual shortage of staff is not to be preferred to a staff which is constantly changing; especially, as often happens, if replacements are not forthcoming to fill positions vacated. The situation should however begin to improve from now on; because the larger Chinese schools are about to open middle schools—one, the Chung Hwa School, Brunei Town, has already done so. This should have the effect, in due course, of not only producing teachers with higher academical qualifications; but also, what is more important in connection with the itinerancy referred to above, producing Chinese teachers having Brunei domicile. All Chinese schools were inspected during the year by a qualified inspector of Chinese schools lent by the Sarawak Government and reports indicate that, in spite of staffing difficulties and difficulties in respect of accommodation, all round progress was met with. The larger schools now pay greater attention to the teaching of English and the standard of attainment has risen considerably.

The ready co-operation during the year of the Management

Committees and the Headmasters of all Chinese schools is gratefully acknowledged and appreciated.

Finance:

The total amount spent on Education during 1953 was \$806,289.85. A table showing expenditure under main-heads follows:—

1. (a) Annually Recurrent Expenditure	\$155,331.62
(b) Special Expenditure	53,195.30
(c) Personal Emoluments	379,854.44
	<hr/>
	\$588,381.36
2. (a) Public Works Department Expenditure on new schools buildings, playing fields, teachers quarters, architect fees, school plans ...	*\$217,908.49
	<hr/>
Grand total	<hr/> \$806,289.85 <hr/>

*This does not include cost of repairs and upkeep of buildings.

Departmental Head:

Mr. J. Pearce continued to hold the post of State Education Officer throughout the year.

(b) *Public Health.*

HEALTH AND HOUSING

INTRODUCTORY

The Medical Department, which is administered by the State Medical Officer, at the end of 1953, had a staff consisting of three other Medical Officers, five European and two locally trained Nursing Sisters, twenty Hospital Assistants, thirteen trained and thirty Assistant Nurses, eight senior technicians and 200 subordinate staff, working in the 150 bedded Brunei Hospital, 22 bedded Kuala Belait Hospital, 2 Outstation Dispensaries, four Riverine and one Road Travelling Dispensary. The State

Medical Officer is adviser to the Sanitary Boards of Brunei and Kuala Belait-Seria. There is liaison with Medical personnel of the British Malayan Petroleum Company Hospital at Kuala Belait. The Department is understaffed in the senior cadres of Sisters and Nurses and its personnel have not had the advantage of sustained tuition and training. No less than 144,009 attendances, or over twice the population, took advantage of its services, and public demand appeared progressive with the general broadening of Education and enlightenment. Admission to Hospitals increased by 1,101 over the previous year and there was an increase of 24,008 in Out-patient attendances; 11,168 more people attended the Maternity and Child Welfare Clinics.

The Department is separable into its components Medical and Health sections, the Medical concerning the care of disease whilst the Health section is preventive. The work of the year under review indicates this difference of function and of outlook.

The Maternity and Child Welfare activities are demonstrating, that State Welfare is stretching out into new channels, into the home and into the countryside.

The Department shows a general increase of work performed. All attendances show a yearly progressive increase which is generalised throughout the State but noticeable, too, are the figures returned by the Hospital at Kuala Belait where Maternity and Child Welfare activities and the treatment of disease particularly amongst women and children has attained a high standard, and by the success of the Health Clinics centred on Brunei.

The following comparative tables indicate the extent of the year's work and the progress of public demand:

MEDICAL ATTENDANCE

			1950	1951	1952	1953
BRUNEI:	Inpatient	...	970	1242	1394	2143
	Outpatient	...	25110	20520	30256	35965
KUALA BELAIT:	Inpatient	...	—	430	746	1098
	Outpatient	...	20685	25266	32157	45449
TUTONG:	Inpatient	...	54	71	69	83
	Outpatient	...	2354	10385	19350	22571
TEMBURONG:	Inpatient	...	81	63	18	4
	Outpatient	...	2505	6773	6200	7986

HEALTH AND MATERNITY CENTRES

			1950	1951	1952	1953
BRUNEI:	Health Clinic					
	Attendance	...	1829	1748	4108	3482
	Maternity					
	Case	...	3717	3258	2333	7960
KUALA BELAIT:	Births	...	696	434	813	790
	Health Clinic					
	Attendance	...	1082	1444	6211	8138
	Maternity					
TUTONG:	Case	...	742	1001	1987	3250
	Births	...	321	364	279	325
	Health Clinic					
	Attendance	...	—	—	525	532
MUARA & SARASA	Maternity					
	Case	...	—	—	243	650
	Births	...	—	—	53	65
	Health Clinic					
SANGKURONG:	Attendance	...	—	—	—	591
	Maternity					
	Case	...	—	—	—	240
	Births	...	—	—	—	24
SANGKURONG:	Health Clinic					
	Attendance	...	—	—	—	392
	Maternity					
	Case	...	—	—	—	540
	Births	...	—	—	—	54

RURAL CLINICS

		1950	1951	1952	1953
Brunei Kampong	...	—	—	2000	1838
Kuala Belait	...	—	—	2906	—
Tutong	...	—	—	336	—
Sangkurong	...	—	—	150	—
Tanjong Maya	...	—	—	80	14
Sarasa	...	—	—	350	—
Muara	...	—	—	50	—
Berakas Estate	...	—	—	75	142
Temburong	...	—	—	—	376

SOCIAL SERVICES

	1950	1951	1952	1953
Lamunin	...	—	—	153
Baru Baru	...	—	—	130
Kilanas	...	—	—	63
Sinaut	...	—	—	50
Kiudang	...	—	—	61
Danau	...	—	—	115
Lumapas	...	—	—	50
Kumbang Pasang	...	—	—	99

SCHOOL VISIT ATTENDANCE

Brunei	...	...	2,332 pupils
Rural area Brunei	...	...	34 ..

TRAVELLING DISPENSARIES

	1950	1951	1952	1953
Brunei (Riverine)	... 4,700	608	1,143	1,446
Kuala Belait	... 2,024	839	1,325	3,208
Tutong	... 4,060	1,029	497	1,995
Temburong	... 1,319	707	1,268	1,180
Brunei (Road)	... 11,004	7,090	8,822	9,386

HEALTH VISITING

	1950	1951	1952	1953
Brunei	... —	—	1,715	3,146
Kuala Belait	... —	—	2,096	2,244
Tutong	... —	—	336	3,054
Temburong	... —	—	100	80

TOTAL ATTENDANCES FOR THE STATE

	1950	1951	1952	1953
In-Patient	... 1,105	1,806	2,227	3,328
Out-Patient	... 50,654	62,944	87,963	111,971
Births	... 2,316	2,805	2,809	2,903
Health Centres	... 5,546	7,447	14,639	25,807

TOTAL: 144,009



River Kampong Health Clinic



Two scenes of distribution of food to school children in Brunei District.



The interior of the Central Cookhouse for the Feeding Scheme in Brunei]



Distribution of food to children in a school in Brunei District



Loading the Feeding Scheme river transport at the Customs Wharf, Brunei



Loading the Feeding Scheme vehicles in Brunei Town

The Health inspectorate works in conjunction with the Sanitary Boards in Brunei and Kuala Belait-Seria under the direction of the State Medical Officer. Through such representation Medical and Health aspects of the multitudinous activities of the State can be reviewed which is of a considerable importance at the time when the rebuilding of towns is progressing with such rapidity. Faulty planning at this stage may have great influence on the future and the Department is particularly concerned to prevent overcrowding, and its resultant Tuberculosis, so prevalent in older towns in the South-East Asia. The development of pure water supplies, of efficient sewerage disposal, and drainage requires care at this stage.

A further step in preventive medicine has been the start of a State School Feeding Scheme. The object of the scheme is to ensure that all school-children receive one good meal in the day. This meal is provided free of charge by the Government. The scheme commenced in November, 1953, and by the end of the year had extended to eleven schools covering 800 school-children. Eventually the scheme is intended to cover all school-children in the State. The policy has been to encourage school headmasters and teachers to take an interest and assist in the scheme. There is no coercion, and so far the response has been very satisfactory.

School children are being weighed at regular intervals and a dental survey is envisaged in 1954. It is hoped that a comparison can thus be made over the years, and that the scheme will aid in eliminating diseases due to defective diet and malnutrition.

STAFF

(1) *Additions*

- 2 Medical Officers
- 1 Sister Tutor
- 1 Storekeeper
- 1 Clerk Grade "B"
- 1 Matron Grade II
- 1 Staff Nurse
- 6 Trained Nurses

- 1 Probationer Nurse
- 1 Assistant Nurse
- 1 Probationer Hospital Assistant
- 2 Attendants

(2) *Resignations*

- 1 Probationer Nurse
- 1 Assistant Nurse
- 1 Pupil Midwife
- 1 Probationer Hospital Assistant
- 1 Attendant
- 1 Wash Amah

(3) *Change of Staff*

9th November 1953 Sister I. A. Weir assumed duty.
26th October 1953 Sister M.C. Murdoch relinquished duty.

(4) *Disposal of Staff*

The following diagramatic table shows the establishment of this Department at the end of 1953.

THE FOLLOWING REPRESENTS THE ESTABLISHMENT OF THE DEPARTMENT 1953

[illegible]

During the year the following visits were paid to the Medical Department:—

Sister Friis (W.H.O. B.C.G. Team)	...	12.2.1953.
S. Polak Esq. (UNICEF Mission Chief)	...	12.2.1953.
Dr. Roberts (W.H.O. B.C.G. Team)	...	17.2.1953.
Dr. Hagen (W.H.O. B.C.G. Team)	...	17.2.1953.
Lady Limerick (Vice Chairman B.R.C.)	...	19.3.1953.
Dr. W. G. Evans (D.M.S. Sarawak)	...	21.5.1953.
Miss E. Hill (W.H.O. Nursing Supt.)	...	24.3.1953.
Dr. A. M. W. Rae (Colonial Deputy Medical Adviser)	...	9.5.1953.
Dr. W. G. Evans (D.M.S. Sarawak)	...	22.6.1953.
Dr. Sambasivan (W.H.O. B.C.G. Team)	...	14.10.1953.

PROGRESS

BRUNEI TOWN—The Hospital was completed and opened in March, 1951. The Hospital was rapidly erected, and built of Situf foam. This has had unfortunate results as the material has not settled completely yet, and cracks still appear in the walls all over the Hospital. There is some improvement lately but repairs are necessary from time to time resulting in an untidy appearance. Frequent distempering and painting are necessary to preserve a general aspect of cleanliness and smartness.

The electric current supply varies, at time being fairly weak. It is not enough to work all the modern electrical appliances which could be fitted in the Hospital. Smaller bulbs have been fitted to diminish the consumption of electricity.

The wards are not as well planned as they should be. For example, there is no separate Female Ward and a poor Female Tuberculosis Ward. The former Ward is sited within the Maternity Ward, while the latter lies behind the Kitchens separated by a partition, though in the same building. It is hoped that architect Vetter will have some useful suggestions to offer when he visits the State in 1954.

The Out-patient Department is small and cramped, but plans are being drawn up for a new Out-patient block containing Male and Female sections, a Dental Clinic, and a Tuberculosis Clinic. This will be considered in 1954 with expansion of the Hospital.

The laundry is inefficient, and a modern one is indicated which will also be considered in 1954. The drainage system in front of the Hospital was corrected and completed in 1953.

BUILDING—The building programme in 1953 included the construction of semi-detached quarters for the Matron and Health Sister of the Hospital in Brunei. The Nurses Home was completed and further expansion considered. The old Hostel for Nurses was taken over by the Police as an emergency measure for use as barracks. It was returned to the Medical Department in November, 1953, and reconditioned. The accommodation near the Hospital for junior staff has improved but still is inadequate.

STAFF—The staff in Brunei Hospital has increased during 1953. There is now another Medical Officer working in the Hospital to relieve the State Medical Officer of some of his clinical duties. A Matron Grade II arrived during the year and also a Red Cross Sister Tutor.

THE UNICEF/W.H.O.—Sister is now running the State School Feeding Scheme, though a replacement will have to be found in 1954 when she leaves. The Health Clinics are looked after by a Health Sister, who trains the Pupil Midwives, and runs the Clinics herself. Five Filipino trained Nurses were employed on a contract basis during the year, and the number of Assistant Nurses raised to thirty. The number of probationer Hospital Assistants has increased, and it is hoped that some of the above will be sufficiently trained in the next two years to form the nursing nucleus for the new Hospital in Kuala Belait. As the nursing position improves, it is hoped to raise the standard for new applicants to ensure the Department gets the best.

EQUIPMENT—Many new instruments ordered for the Operation Theatre arrived during the year. A great deal of Laboratory equipment and appliances arrived and was put into use. Two more Outboards were purchased during the year. These are being used to aid the Health Sister in her work.

PATIENTS—Attendances show an all round increase. Good use was made of the modern Operation Theatre. There was an increase in indoor admissions of 1,101, in Out-patient attendances

of 24,008, and 24,991 more laboratory examinations were carried out than in the previous year.

KUALA BELAIT—The status of the Dispensary in Kuala Belait was raised to that of a Hospital in November, 1953.

BUILDING—A new Operation Theatre was completed and the In-patient building was extended on one side. The latter construction permitted an increase in bed strength. Six beds were put in, and this number was later increased to eight. In Seria a new Quarters was taken over as the Health Clinic for the area.

The new Government T.B. Ward of 22 beds in the British Malayan Petroleum Company Hospital was opened in November, 1953. This has helped considerably in reducing the number of cases transferred to Brunei. It is a great boon to the people in Kuala Belait District.

STAFF—There were increases in 1953. There are now three trained Midwives, and three Pupil Midwives. There are five trained Hospital Assistants, one of whom runs the Laboratory. He returned from a course at the I.M.R., Kuala Lumpur towards the end of the year.

The Sister-in-Charge of staff proceeded to New Zealand in December, 1953, on a course. One Trained Nurse was promoted to Staff Nurse during the year. One probationer Nurse resigned, and one trained Nurse joined the staff in 1953. The number of attendants has also been increased, and one more driver added to the establishment.

For the first time there were two Doctors posted to Kuala Belait and this enabled a thorough tour of the whole District to be completed. Unfortunately for a period of five months there was no Doctor, and the Dispensary (as it was known then) was run by the Sister. Under the conditions the staff did a good job of work.

EQUIPMENT—One ambulance was added to the Hospital transport during 1953.

Unfortunately it is a very large and heavy vehicle, and suitable for use only on proper roads. The Landrover ambulance is used where the roads are rough.

There have been vast increases in Hospital equipment during 1953. Many new instruments have been sent to the Hospital, and a new anaesthetic apparatus was received in December, 1953. The X-Ray apparatus was sent down in December but is still unpacked owing to lack of room. When the new buildings are taken over by the Hospital, this will be installed, and put into use.

Laboratory equipment has also been improved and additions made, thus increasing laboratory facilities.

PATIENTS—There were 45,965 attendances and 1,098 admissions.

Outstation Dispensaries:

BUILDING—No major construction was undertaken in 1953.

STAFF—No major changes in staff occurred. In Temburong a Nursing Sister was employed part-time for work on Health Clinics.

EQUIPMENT—No major additions were made.

PATIENTS—Attendances show an all round increase. The figures are as follows:—

- (1) *Tutong*:—There were 83 admissions with 22,571 attendances.
- (2) *Temburong*:—Total attendances were 7,986 with 4 admissions.

These figures do not include those transferred direct to Brunei Hospital for admission.

Travelling Dispensaries:

BRUNEI—The Travelling Dispensary paid visits every fortnight to the following places; Baru Baru in the Brunei Bay, and went as far as Limau Manis in the Ulu Brunei river.

KUALA BELAIT—The Travelling Dispensary, which does very good work, has only one engine, and if this should break down, trips cannot be completed. The boat itself needs overhaul and reconstruction to prevent spray flying back into the boat. In spite of these handicaps, medical treatment has been taken all over the District. The following places were visited regularly;—Labi, Sungei Liang and Lumut, Bukit Sawat and Ulu Belait proceeding up Sungei Besar.

TUTONG—The Travelling Dispensary from Tutong also visited Tanjong Maya and also Ulu Tutong as far as Ukong terminal. These visits were made regularly.

TEMBURONG—The Travelling Dispensary visited Labu, Bukuk and proceeded to Ulu Temburong as far as Sungei Amoh.

<i>Dispensary</i>	<i>Attendance</i>
Brunei (Riverine)	... 1,446
Brunei (Road)	... 9,386
Kuala Belait	... 3,208
Tutong	... 1,995
Temburong	... 1,180

Maternity and Child Welfare:

The new Clinic opened by Her Highness the Rajah Isteri on 31st August, 1952, in Kampong Ayer is in use twice weekly. Mothers and children are brought by Outboard when necessary. The Health Sister has worked hard amongst the 7,000 people of the 28 separate Kampongs comprising this river town and has their confidence. The policy has been to go out into the peoples' homes in an effort to make them realize that help will be afforded. In the past the Malay community has not voluntarily taken a great advantage of Hospital facilities, even though so close at hand, as it should, and the present policy is proving successful.

In the State new Clinics were opened and existing ones continued where possible. Clinics are now run at the following places:—

Brunei Town	Berakas Club
Brunei River Kampong	Muara
Kilanas	Sarasa

Sangkurong	Baru Baru
Kampong Sinaut	Lumapas
Tutong	Temburong
Danau	Kumbang Pasang
Seria	Lamunin
Kuala Belait	Kiudang

The ones at Tanjong Maya and Kiudang were closed owing to poor attendance. Temburong is now run by a locally employed European Sister. The Clinic at Lumapas has been temporarily discontinued as there is no P.W.D. truck available at the moment across the river on the Limbang road.

There are 4 Midwives employed in Brunei with 3 Pupil Midwives.

Rural Midwives are working in Sangkurong, Tutong, Muara and Sarasa, and Temburong.

Two Midwives are working in Kuala Belait together with three Pupil Midwives. One Midwife is working in Seria, and now has accommodation.

It is hoped that three permanent Clinics at Sangkurong, Mile 18 Jalan Tutong and at Lamunin will be built in 1954. The latter two will be staffed by rural Midwives with a slight knowledge of nursing.

PATIENTS—There have been epidemics of Whooping Cough and Gastro-enteritis during the year, the latter causing many deaths among young babies before the outbreak was controlled.

A scheme was run by the W.H.O. to vaccinate the entire State for Tuberculosis; since then it has been attempted to B.C.G. all small babies.

Clinic attendances have increased. Due to a film on Medical and Health work, shown during and after Baby Week (see below) the demand for new Clinics has been great. The amount of abnormal midwifery has decreased.

There were 25,807 attendances at Health Clinics and 1,258 confinement cases were delivered by trained personnel.

NON STATE ASSISTANCE—Nestle's continue to give a quantity of powdered milk to Brunei and Kuala Belait and the Red Cross contribute \$30.00 per month to buy groceries for the needy. As an outcome of the Baby Week run in June, \$1,400.00 has been paid into the Bank to start a Welfare Charity Fund.

BABY WEEK—This was run on June 10th. Baby Shows were conducted in various parts of the State. The number of entrants was encouraging and the Raja Isteri presented the prizes at most of the places visited.

A competition has now been entered, organised by the National Baby Welfare Council. A shield will be awarded to the Colony which has run the most successful Baby Week.

Other Schemes:

ASSISTANT NURSES TRAINING SCHEME—This continued to gain ground and there are now 30 Assistant Nurses. It is hoped some of these will eventually become probationer Nurses, and continue their training to become fully trained Nurses. The UNICEF/WHO Sister was responsible for their training for the first 9 months of the year. A British Red Cross Sister arrived in October, 1953, and took over the task of training the girls. New Text books, teaching aids and appliances, and diagrams have been ordered for the lecture room. Generally the girls are making good progress.

STATE SCHOOL FEEDING SCHEME—This started on a small scale in November, 1953, and by the end of the year there were 11 schools with 800 pupils in the scheme. The objects of the scheme have already been explained. The scheme is under the direct supervision of the UNICEF/WHO Sister who obtains her instructions from the State Medical Officer. Eventually it is hoped the scheme will cover 44 schools with a total of 6,500 children. Naturally as the scheme is extended, there will have to be more staff employed to supervise the food, and method of distribution. Two supervisors will be necessary, one for Brunei, and the other for Kuala Belait District.

Incidence of Disease:

Tuberculosis continues to be the main disease of import in the State. A mass radiography campaign has not been carried

out yet, but it is hoped to get this started next year. The new T.B. Ward in Kuala Belait is one step towards overcoming the difficulties encountered in treatment of the disease. A Social Welfare Committee should be the next step. This will have to be considered soon, as a number of Tuberculosis patients are afraid to enter Hospital for treatment, because their families will then starve. It is a vicious circle at present—if the patient remains at home working, he gets worse and spreads the infection causing more damage. If he enters Hospital for treatment, his dependants at home are short of food and money, which worries the patient, and retards his progress, eventually leading him or her going home against medical advice. Assistance to dependants in genuine cases would be of great help.

Asthma appears to be fairly common, and is found in patients of all ages. We are not aware of the reasons for this but it strikes a medical man immediately. The incidence of the disease is not confined to any particular area.

Helminthic infections remain very common, the large and dangerous infestation being that of Hookworm. The remedy for this lies in Sanitation and Hygiene. It is rather pointless administering treatment to a case of ankylostomiasis, when the case returns home and is re-infected almost immediately. The Health Department is concerned about the matter, and taking steps, as far as is possible under the circumstances, to install proper latrines in Towns and Kampongs.

Gastro-enteritis is sporadic, but there was an epidemic in 1953 which caused a few deaths among children. A measles epidemic occurred in 1953, which subsided naturally. A few cases of Parotitis (Mumps) occurred, the majority of cases being adults, while Whooping Cough cases occurred among children. Bronchitis was fairly commonly met with in all ages and Bronchopneumonia in children.

There was no case of Diphtheria reported, one case of Typhus, and a few cases of Typhoid fever. Malaria was occasionally seen, while the few cases of Filaria appeared to be chiefly in males.

Arthritis both Rheumatic and Rheumatoid is not uncommon, and there were a few cases of Rheumatic Cardiac disease treated. Dermatitis is common, and troublesome, the treatment often lasting for weeks. Many are probably due to an initial allergy.

Amoebic Dysentery was diagnosed in a few cases, but there are probably more cases, who do not take the occasional abdominal upset, caused by it, seriously.

Among operation cases, the Hernias form a large percentage. Cysts are also common.

As in 1952 Tuberculosis and Helminthic infection continue to be the main diseases causing disability in the State. Both are common, and while the former is a severe disabling disease, the latter is very much more widespread though curable in a shorter space of time. Malaria is definitely on the down-grade and the anti-malarial campaign should ensure this state of affairs continues.

Rural affairs—The Department has continued to spread its influence amongst rural communities chiefly through the expansion of the Health Clinic and Travelling Dispensary service. There are still areas outside of easy aid as in the Mukims of Lamunin (served by a Travelling Dispensary weekly) and Lumpang and in the interior areas of Kuala Belait District. Consideration is being given to the possibility of extension of Dispensary and Midwifery services to these outlying areas. Much will depend on the exertions of individual Dressers and Midwives once Dispensaries are established. It is most important that friendly confidence is established between far off communities and the Department, and out-lying places are visited with this end in view.

Medical Department of the B.M.P. Co., Ltd:

The Chief Medical Officer was asked for some statistics regarding the work of his Department during 1953:—

Briefly the relative figures are as follows:—

(a) General attendances—Out-patients Clinic:

Kuala Belait Hospital	..	..	21,102
Seria Medical Hut	..	..	28,876
Seria Welfare Clinic	..	..	23,660
Mile 4 Clinic	..	..	8,315
Total	..		<u>81,953</u>

(b) Hospitalisation:—

Total admissions	..	..	3,054
Total In-patients days	..	..	17,414
Percentage bed-occupancy	..	..	58.66

(c) Birth etc:—

In-hospital: Live Births			
Still Births	..	..	8

Domiciliary Midwifery:

Live Births	..	..	351
Still Births	..	..	6

Ante-natal Visits	..	..	1,583
Post-partum visits	..	..	1,820

The British Malayan Petroleum Company Hospital in Kuala Belait does a great deal of useful work in the area. It deals with all serious emergencies there, and submits the bills of such cases for payment by Government. It staffs and runs the Government Tuberculosis Ward sited in its own Hospital area, and this scheme is financed entirely by the State. When the new Government Hospital is built in Kuala Belait, the State will take over full responsibility and treatment of such cases.

Health Department:

The work of this Department increased in the year 1953. The reasons are fairly obvious—Brunei town was being built up, and so also Kuala Belait and Seria. New Shophouses were being erected in all three places, but unfortunately owing to lack of staff, Brunei town was the only one where some measure of direct

and adequate supervision was possible. It was only towards the end of the year that more attention was paid to the towns of Kuala Belait and Seria. This has resulted in a lag in Sanitation and Hygiene in these areas, but it is hoped that the situation will improve considerably in 1954.

Staff—For most of the year the Health Department was staffed by one Health Inspector, who was stationed in Brunei. He made periodical visits to towns and Kampongs in the State. Towards the end of the year another Health Inspector commenced work, and was posted to Kuala Belait. He is doing useful work there.

The Sanitation and Hygiene in Brunei, Kuala Belait, and Seria is the responsibility of the Municipal Boards there, but the Health Department assists by giving advice, helping with labour when necessary, and carrying out routine inspections. Matters requiring attention are reported to the Chairman of the Municipal Board. This assistance is considerable and useful.

The staff position at the end of 1953 was as follows:—

Health Inspector	..	2— 1 at Kuala Belait
Mosquito Collector	..	2— 1 at Kuala Belait
Health Mandor	..	1
Head Labourer	..	4— 1 at Kuala Belait
Labourer	..	37—10 at Kuala Belait.

Equipment—Much new equipment has been obtained. A great deal of this is anti-malarial equipment some of which was sent down to Kuala Belait towards the end of the year.

WORK CARRIED OUT—

(1) *Scavenging and Conservancy:*

Brunei—The average number of dustbins emptied daily is 436. The amount of refuse removed daily is 20 cubic yards, and 368 nightsoil buckets are cleared daily. All refuse collected is dumped and burnt at Mile 3½ Tutong road. Nightsoil is dumped into the river at suitable points.

Kuala Belait—The amount of household refuse removed daily is 432 cubic feet. Trade refuse is about 1,300 cubic feet daily. All refuse is incinerated but a new

site is being sought for the incinerator. At present it is sited too close to the Bazaar area. There are 450 nightsoil buckets which are cleaned daily and emptied into the river. A water carriage system is envisaged during the next few years, but this will depend on an adequate supply of water being obtained first.

Seria—Refuse and nightsoil are disposed of at the B.M.P. Company disposal points. The former is incinerated, and the latter is emptied into an oily tidal swamp, which appears to be very satisfactory.

Rural Areas—Riparian latrines and bore-hole latrines have been constructed in these areas, but as still inadequate to serve the needs of the population. The Health Department is concerned over the lack of these facilities, and has been directing its attention to these areas. Propaganda has been employed, and demonstrations given to the people. It is hoped the situation will improve in 1954.

(2) *Housing:*

<i>Brunei</i> —Total No. of shophouses occupied	..	76
Total No. of shophouses completed	..	29
Total No. of shophouses under construction	..	35
Total No. of temporary shophouses dismantled	..	34
Total No. of residential houses dismantled	..	3
Total No. of Government houses built		56
Total No. of private houses built	..	43

To relieve overcrowding in the Municipal area Government has approved housing and resettlement schemes in the Kumbang Pasang and Brakas areas. Flats and prefabricated houses are to be built.

Kuala Belait and Seria—The number of dwelling houses completed and occupied during the year was 39 in Seria and 10 in Kuala Belait. In addition 60 shophouses in Kuala Belait have been completed. Housing therefore may be said to be adequate with the present density of population. Information on the exact number

of residential buildings completed and brought into occupation by the British Malayan Petroleum Company has not yet been received but the number is certainly more than last year. The same may be said of Government housing except in lesser degree.

(3) *Water Supply:*

Brunei—The Tasek water supply treatment plant has not been completed yet. This scheme requires high priority as repeated bacteriological examination of the water has revealed that it is not satisfactory.

Kuala Belait and Seria—The towns suffer from a water shortage. Some of the houses are supplied off the British Petroleum Company's mains, but the majority of non-company people in these areas have to rely on rain-water storage tanks. However it appears a water supply scheme has been approved, and work will be starting when the plans are ready.

(4) *Drainage:*

This was noticeably deficient in most areas at the beginning of the year. However by the end of the year, work on drains had increased considerably, and there was far more attention being paid to them, particularly in the Kuala Belait area.

(5) *Food Animals Imported and Slaughtered:*

Brunei—The following animals and birds were imported:—

Pig	..	224 head
Goat	..	362 „
Bird	..	385 chicken

Approximately 95% of these imported were from Mempakul, British North Borneo.

Total No. of pig slaughtered	..	819 head
Total No. of buffalo slaughtered	..	405 head
Total No. of cattle slaughtered	..	5 head

Regular ante-mortem examinations of animals were carried out. Plans for new slaughter houses at Mile

3½ Tutong road were approved and should be ready for use in the new year.

Kuala Belait and Seria—The total number of pigs slaughtered during the year was 1,945 and cattle 621. The number of pigs imported from Singapore was 1,728. From Sarawak 36 pigs and 8 cattle. Fowl although almost free from Newcastle disease had still to be imported from outstations, especially incubated chicks and ducklings from the Straits Steamship boats.

(6) *Ports Health Work:*

No. of foreign incoming vessels granted Pratique ..	11
No. of Optional Bill of Health issued ..	21

Brunei ports are not rat free and no measures have been taken to isolate ships at wharf or to protect port installations. There is a slight danger of Plague importation, particularly from Bangkok from where rice may be shipped direct.

(7) *W.H.O. Malarial Eradication Project:*

In October, Dr. G. Sambasivan, W.H.O. Malariologist, arrived to conduct the malarial eradication project in the rural areas. Every possible help was extended to him by the Health Department. From records, the following may be of interest;

The campaign involved only spraying of houses in areas where malaria is present:—

No. of houses sprayed ..	1,248
No. of persons protected ..	6,567
No. of oilers employed ..	8
No. of foremen ...	3
Amount of DDT expended ..	2,021 lbs.

In addition to the above, anti-mosquito measures were carried out in various areas.

(8) *Immunisation Campaigns:*

A BCG campaign sponsored by the WHO and under the supervision of a W.H.O. Nurse was initiated in March and continued by local personnel throughout the year.

This campaign came into conflict with the planned campaigns against Typhoid, Whooping Cough and Diphtheria. However, Diph/Pertussis inoculations were given and included a total of 1,095 children in Brunei Town.

(c) Housing and Town Planning:

BRUNEI TOWN

The final Draft of the Brunei Town Plan is nearly completed. Apart from the Bazaar area itself, it provides for areas for the development of factories, noisesome trades, godowns, etc. There is also provision for a number of green spaces on the outer perimeter of the town, and children's playgrounds, parking spaces, and bus shelters within the actual Bazaar area. The future road net-work has also been planned. A factor which will tend greatly to delay the final implementation of the Plan is that in Brunei Town, and to a lesser extent in Kuala Belait and Seria, much of the land has long since been alienated. This alienated land has not been satisfactorily planned in the past; unsightly houses have been erected in unsightly positions. The remedy will have to wait the final condemnation of such houses which may be many years to come.

On the other hand with the purchase by Government of the Brunei United Plantations during the course of the year, a large tract of undeveloped land has been made available for careful planning. Much of this area will be used for Government housing.

With the help of 90% Development loans a further 34 shophouses were completed during the year bringing the total up to 65, and work was commenced on 35 more, which will bring the total number of shophouses in the Bazaar area to 100. In addition ten second-class shophouses are planned in the Tasek area. This latter has been done, inter alia, to encourage expansion in a northerly direction towards Barakas where the new airfield and re-settlement areas are already under construction. This is made essential owing to the nature of the terrain as the Brunei and Kedayan rivers on two sides and the hills on the third prohibit expansion in other places. Twenty-nine applications to

build private houses in the Municipal Area have been received during the year by the Municipal Board. The majority of these have been approved subject to minor alterations. During the latter half of the year the Municipal Board has insisted on a considerably higher standard of private housing, and with limited exceptions leaf or unsightly zinc roofing has been prohibited. In order to reduce the incidence of tuberculosis the minimum size of bedroom normally approved has been limited to 1,300 cubic feet.

Owing to the Development Plan and the consequent great increase in labour and technicians, there has been a serious housing shortage. As a natural corollary inflated rents were charged for even the poorest accommodation, and in some areas considerable squalor still exists. No houses have been condemned during the year as this would only lead to further overcrowding in other dwellings. As a measure to combat this, plans have been drawn up for a block of forty-five flats and an Estate of thirty prefabricated houses, which will be built by government and leased to the Public. This, taken in conjunction with the private building of houses will, it is hoped, alleviate the situation.

The Municipal Board, whose name was changed from Sanitary Board during the year, has continued to convene monthly.

SERIA AND KUALA BELAIT

The two towns of Seria and Kuala Belait are growing steadily according to plan. The former still has a kajang of mat shed bazaar but a new stone brick bazaar is in course of erection. The first forty shops should be ready for occupation in March. A number of smaller stone and brick shops will also be built during 1954 in conformation with the town plan. The stone and brick bazaar at Kuala Belait was completed during the year as were the approach roads. The back drains still remain to be done and earth filling between some of the blocks has not been completed.

A fine new Chinese School was completed at Seria which was assisted considerably by Government and British Malayan Petroleum Company financial support.

A large cinema was nearing completion at the end of the year at Seria. There are altogether 60 new shophouses. Sites for other business buildings are mostly built up including Borneo Motors, Harrisons & Crosfield, Borneo Company, a cinema hall and the Brunei Press. A new wharf was also completed. Further extension to it is expected to begin next year while works on new markets, pig slaughter house, Customs Office and other Government buildings are to begin shortly. Several Government quarters have been completed and occupied during the year. A number of residential lots in the Kuala Belait Municipal area measuring more than 22 acres have been acquired for the proposed Government hospital. Land for other Government buildings including a "Sanitary area" for the disposal of refuse and nightsoil have also been earmarked outside the Municipal Board limit. Extensive metalling of roads in the Kuala Belait and Seria Municipal areas has been carried out and regrading of drains undertaken by the Public Works Department.

Intermittent piped water supply is at present obtained from the British Malayan Petroleum Company's mains. A scheme for a Government pipe line has been drawn up and it is likely that constant piped water supply will be available by next August.

Most of the lots in the residential areas of both towns have been taken up but building has been hampered as access roads have not been a high priority as against main roads, etc.

The British Malayan Petroleum Company have also a big building programme in hand. Wimpeys and Hong Kong Contractors are gradually replacing their kajang or matshed quarters with situfoam bungalows. In other cases old matshed barracks are being replaced with more durable buildings.

Natives of the poorer class still use the kajang for their buildings, when worn out it is easily replaceable.

In the case of shops, and other buildings in the bazaars the owners have been granted 3% interest loans towards the cost of construction.

Both Seria and Kuala Belait have Sanitary areas and the Board sits regularly in Kuala Belait. Outside the two said towns

and the British Malayan Petroleum Company area there is very little activity. The area of Labi may develop if and when oil is found in workable quantities.

(d) *Social Welfare:*

The following Social Welfare activities exist in the State:—

Branches of the Boy Scouts and Girl Guide Associations at Brunei Town, Seria and Kuala Belait. These Associations consist of children of all races and are particularly active in Kuala Belait and Seria. The Seria Girl Guides Association were much in the public "eye" and staged a most excellent theatrical performance during Coronation week. Later, on a visit of nearly one hundred Guides and Brownies to Brunei Town, it was repeated in the Hasanah Bolkiah Theatre, where it was very popularly received.

Miss F. H. Gwilliam, an adviser to the Colonial Office on the Girl Guides Association, visited the State towards the end of the year.

The British Red Cross Society has branches in Kuala Belait, Seria and Brunei Town. New Red Cross huts are shortly to be opened at Kuala Belait and Brunei Town.

There is at Kuala Belait a Chinese Charitable Institute which assists aged Chinese who have no one to fend for them.

A Government Stores for the benefit only of Government servants operate in Brunei Town and in Kuala Belait.

Chapter VIII.

LEGISLATION.

THE main body of the law consists of the enactments which have been passed from time to time by His Highness the Sultan in Council, certain Enactments of the former Federated Malay States and certain Ordinances of the Colony of Sarawak, which have been adopted by the State with the necessary local alterations.

The external legislation which has been in this way adopted comprises the Civil Procedure Code, the Law of Evidence, the Law of Specific Relief and the Law of Contracts in force in the Federated Malay States before the war, and the Penal Code and the Criminal Procedure Code of Sarawak.

The language of all legislation is English.

It should be added that, by the Application of Laws Enactment 1951, where no provision is made by the enacted or adopted laws of the State, the common law of England, English principles of equity and statutes of general application have the force of law in the State.

The State Council met on twenty-four occasions and following Enactments were passed:—

- No. 1 The Prisons (Amendment) Enactment—which provided for the transfer in certain circumstances of Brunei convicts to Sarawak, instead of to Singapore, as hitherto.
- No. 2 The Education (Amendment) Enactment—which corrected a grammatical error in the Principal Enactment.
- No. 3 The Consular Convictions Enactment—which provides machinery and procedure by which the State may confer certain powers and privileges on

Consular Officers of foreign States with which consular conventions have been concluded by Her Majesty the Queen.

- No. 4* The Income Tax (Amendment) Enactment—which raised the rate of income tax (which at the moment is payable only by Companies) from 20% of nett profits to 30%.
- No. 5* Sarawak Penal Code and Criminal Procedure Code Adoption (Amendment) Enactment.
and
- No. 6* The Interpretation and General Clauses (Amendment) Enactment.

The effect of these two Enactments is that now, whenever it is desired to amend the Criminal Procedure Code or the Penal Code adopted from Sarawak in 1951, instead of having clumsily to amend the Adoption Enactment amendments can simply be made to “the Penal Code” or “the Criminal Procedure Code” as such.

- No. 7* The Criminal Procedure Code (Amendment) Enactment—which raised the age under which a person cannot be sentenced to death from sixteen years at the time of sentence to eighteen years at the time of the crime and, as is necessary by the almost inevitable lack of documentary evidence of birth, gave the Court power to decide age by appearance and/or other evidence.
- No. 8* The Criminal Procedure Code (Second Amendment) Enactment—which made certain changes in the Code adopted from Sarawak made necessary by the different circumstances of the State.
- No. 9* Interpretation and General Clauses (Second Amendment) Enactment—which gave the Deputy Legal Adviser, Brunei, subject to the contrary instructions of the High Commissioner or the Legal Adviser, all the powers, and imposed on him all the duties, of the Legal Adviser, Brunei.

- No. 10* The Disaffected and Dangerous Persons Enactment—which gives the British Resident, where he has thoroughly satisfied himself that such action is necessary for the peace and good order of the State power to confine a person within the limits of a stated place or area (i.e. to put him “in bounds”) and to punish him with fine or imprisonment if he does not stay within those limits until the order of confinement expires or is revoked.
- No. 11* The Traction Engine and Motor Cars (Amendment) Enactment—which made several stop-gap amendments to the Principal Enactment of 1924 necessary to deal with the existing situation pending the passing of a comprehensive and satisfactory Road Traffic Enactment.
- No. 12* The Vicar Apostolic of Kuching (Incorporation) Enactment—which constituted the Vicar Apostolic a body corporate.
- No. 13* The Undesirable Publications (Amendment) Enactment—which somewhat extended the power to prohibit publications held to be undesirable.
- No. 14* The National Registration (Amendment) Enactment—under the Principal Enactment any person, not an alien or a visitor holding a valid passport, staying more than 14 days must register. This Enactment exempts persons registered in Sarawak from that compulsion. There is a reciprocal provision in the equivalent Sarawak Ordinance.
- No. 15* The Oil Mining (Amendment) Enactment—which has the effect of allowing more latitude to be given to the holders of oil prospecting licences (i.e. licences to take oil out of the earth) in the carrying out of the drilling obligations imposed on them by their licence and the Principal Enactment.

- No. 16** The Motor Vehicles (Third Party Risks) (Amendment) Enactment—which effects the exemption from the provisions of Section 3 (which makes third party insurance of motor vehicles compulsory) of the Principal Enactment of Government vehicles being used for a purpose authorised by the Government. Previously, less clearly and less satisfactorily, it was Government vehicles being used “for the purpose of the Government” which were exempted.
- No. 17** The Post Office (Amendment) Enactment—the object of which was to allow and provide for the franking of postal articles by stamping machines.
- No. 18** The British Nationality Act and Ireland Act Adoption Enactment—the effect of which is that citizens of the Republic of Ireland are not to be treated as aliens in this State, despite the fact that the Republic has left the Commonwealth.
- No. 19** The Sarawak Trade Marks Ordinance and Merchandise Marks Ordinance Adoption Enactment—by which those Sarawak Ordinances were with all the changes made necessary by the differing circumstances of the two countries adopted in the State under the titles of the Trade Marks Enactment and the Merchandise Marks Enactment respectively. The effect of this Enactment is to set up a Trade Marks Registry here and provide for the registration and protection of trade marks, and to create certain offences in relation to trade marks, property marks etc., and provide punishments therefor.
- No. 20** The Municipal Boards Enactment—by which what hitherto were known as Sanitary Boards became Municipal Boards.
- No. 21** The Pensions (Amendment) Enactment—by which several necessary amendments, some suggested

by the Secretary of State, were made in the Principal Enactment, among them, for example, being one which allows a pension to be granted, in exceptional circumstances, to an officer who has been dismissed.

- No. 22* The Transfer of Prisoners Enactment—under which the Resident may make reciprocal arrangements with the Colonies of Sarawak, North Borneo and Singapore for the transferring and receiving of prisoners and criminal lunatics, and by which Sections 7 & 8 of the Prisons Enactment 1920 and Enactment No. 1 of 1953 were repealed.
- No. 23* The Subscriptions Control Enactment—which gives the Government control over the soliciting of subscriptions and the making of collections. No subscription may be now solicited or collection made for a public purpose (as it is defined in the Enactment) without the consent of the British Resident.
- No. 24* The Penal Code (Amendment) Enactment—by which several important amendments were made to the Penal Code, among them being one which brings the law concerning the degree of guilt of a person who commits a crime while voluntarily drunk into line with English law, and another which increases the maximum penalty for causing death by the negligent use of a motor vehicle or firearm from two to five years imprisonment.

[illegible]

Chapter IX.

JUSTICE, POLICE AND PRISON.

The Courts constituted in the State for the administration of civil and criminal law are as follows:—

The Supreme Court of Sarawak, North Borneo and Brunei, consisting of the Court of Appeal and the High Court,

Courts of Magistrates of the First Class,
Courts of Magistrates of the Second Class,
Courts of Magistrates of the Third Class,
Courts of Kathis.

This judicial system was created by the Sarawak, North Borneo and Brunei (Courts) Order in Council, 1951, and the Courts Enactment, 1951. The old Court of Appeal and the Court of the Resident have been abolished.

The Supreme Court:

The Supreme Court, which has a unified jurisdiction over the three territories of Sarawak, North Borneo and Brunei, consists of the Chief Justice (styled the Chief Justice of Sarawak, North Borneo and Brunei) and as many Puisne Judges as may from time to time be appointed.

An uneven number, not being less than three, of Supreme Court Judges constitute the Court of Appeal. In certain special circumstances two Judges can constitute the Court. It deals with appeals, criminal and civil, from the High Court.

One Supreme Court Judge constitutes the High Court. The High Court has an unlimited original jurisdiction in all civil matters other than the annulment of marriages solemnized between Christians in the United Kingdom or any British Colony and matters concerning Mohammedan marriage, religion and divorce. It has an unlimited criminal jurisdiction in the case of all offences committed in the State or on the high seas on board ships

registered in the State, or committed by subjects of the State on the high seas aboard any ship, whether registered in the State or not. It may pass any sentence authorised by law, including sentence of death. Appeals lie to the High Court, in civil and criminal cases, from the judgments of First Class Magistrates, sitting in either original or appellate jurisdiction, and from the judgments of Second Class Magistrates.

Courts of Magistrates of the First Class:

The Court of a Magistrate of the First Class has original civil jurisdiction in suits involving not more than \$500 (which limit may be specially extended by the Chief Justice to \$1,000), and original criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by the law does not exceed two years and the maximum fine does not exceed \$5,000. The maximum sentences which may be passed by the Court are imprisonment for twelve months and/or a fine of \$1,000. The Court has an appellate criminal and civil jurisdiction in respect of case tried by Magistrates of the Third Class.

Courts of Second Class Magistrates:

The Court of a Magistrate of the Second Class has civil jurisdiction in suits involving not more than \$250 and criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by law does not exceed six months and the maximum fine does not exceed \$1,000. The maximum sentences which may be passed by the Court are imprisonment for six months and/or a fine of \$250.

Courts of Third Class Magistrates:

The Court of a Magistrate of the Third Class has civil jurisdiction in suits involving not more than \$50 and criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by law does not exceed six months, and the maximum fine does not exceed \$250. The maximum sentences which may be passed by the Court are imprisonment for two months and/or a fine of \$100.

Courts of Kathis:

The Court of a Kathi deals solely with questions concerning Mohammedan religion, marriage and divorce, and may impose

a fine not exceeding \$50. Appeals lie from this Court to the Sultan in Religious Council.

Procedure in the courts is regulated by so much as is still in force of the Federated Malay States Civil Procedure Code, by the Courts Enactment 1951, by the Sarawak, North Borneo and Brunei (Courts) Order in Council, 1951, by the Sarawak, North Borneo and Brunei Court of Appeal Rules 1951, by the Supreme Court of Sarawak, North Borneo and Brunei (Appeal to Privy Council) Order in Council, 1951, by the Magistrates Courts (Civil Appeal) Rules, 1952, by the High Court of Sarawak, North Borneo and Brunei (Civil Procedure) Rules, and the Magistrates Courts (Execution Proceedings) Rules.

There were three First Class Magistrates, six Second Class Magistrates and two Kathis functioning in the State during the year.

The following table shows the number of cases instituted and disposed of in the various courts:—

FOR THE YEAR 1953.

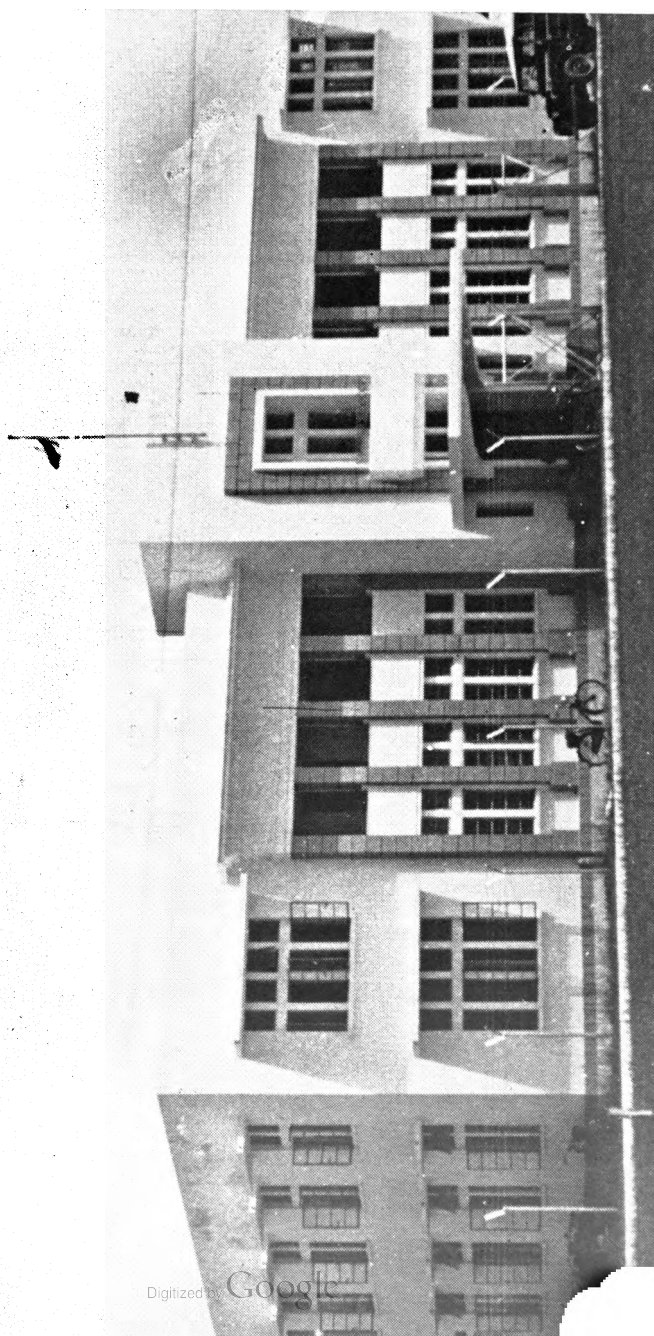
CRIMINAL

District	No. of Cases in High Court.	No. of Cases in 1st Class Magistrate Court.	No. of Cases in 2nd Class Magistrate Court.	Total	No. of Persons sentenced.	No. of Cases Discharged	No. of Cases Withdrawn.	No. of Cases Pending.	No. of Transfer.
Brunei	9	18	255	282	246	15	9	12	—
Belait	5	95	734	834	956	38	61	4	2
Temburong	—	1	2	3	3	1	—	—	—
Tutong	—	1	58	59	57	—	1	—	—
Muara	—	—	—	—	—	—	—	—	—
Total	14	115	1,049	1,178	1,262	54	71	16	2

CIVIL

District	No. of Cases Judge of Appeal.	No. of Cases in High Court.	No. of Cases in 1st Class Magistrate Court.	No. of Cases in 2nd Class Magistrate Court.	No. of Cases Dismissed.	Amount Claimed.	Total of Cases.
Brunei	—	13	8	25	—	\$ 79,955.86	46
Belait	1	3	18	42	—	22,422.09	64
Temburong	—	1	1	—	1	2,296.00	2
Tutong	1	—	—	2	—	166.37	2
Muara	—	—	—	—	—	—	—
Total	2	17	27	69	1	\$104,860.32	114

New Police Station
Brunei Town.



District	Letter of Administration	Coroner Inquest	Criminal Appeal	Appeal Civil
Brunei	—	3	2	1
Belaït	3	6	3	1
Temburong	2	—	—	1
Tutong	—	—	—	—
Muara	—	—	—	—
Total	5	9	5	3

POLICE.

Command:

Mr. P. E. Turnbull, Superintendent, (now Assistant Commissioner) handed over command of the Force to Mr. A. C. Eattell, Superintendent, on the 16th March, 1953.

Mr. J. F. Storey, Senior Assistant Superintendent of Police, handed over command of Belait Police District to Mr. P. J. Rewcastle, Assistant Superintendent of Police, on the 9th June, 1953.

Mr. K. S. Leeston-Smith, Assistant Superintendent of Police, handed over command of Brunei Police District to Mr. B. N. Lewis, Assistant Superintendent of Police, on the 1st October, 1953.

Mr. F. F. Wemyss, Superintendent, remained in charge of the Immigration and Special Branch departments throughout the year.

The headquarters of the Force remained at Kuala Belait.

Establishment and Strength:

There was no change in establishment during 1953. There were, however, some changes in the strength of the Force owing to resignations and dismissals. During the first quarter five other ranks resigned and fifteen were dismissed. These losses were offset somewhat by the enlistment of thirty-five recruits during the year. None of these recruits were trained by the end of the year and they were, therefore, not available for duty in the State.

An Assistant Immigration Officer reported for duty in August 1953.

During early March, 1953, owing to the prevailing political situation, it was found necessary to call for reinforcements from Sarawak; one Inspector and twenty other ranks were promptly provided. During the same month and for the same reason a contingent of the North Borneo Armed Constabulary were flown in and carried out a security practice in the Belait District. At the end of the first quarter this Sarawak contingent was replaced by one, Gazetted Officer, one Inspector and forty other ranks of the Sarawak Constabulary who formed up as an organised platoon stationed at Seria Police Station. At the end of June it was found necessary to move the whole of this platoon to Brunei Town. To fill the gap in the Oilfields area and upon request, the Sarawak Constabulary provided an additional Inspector and forty other ranks. It was found possible after the second trial referred to in paragraph 11 to return the second platoon to Sarawak. The first platoon was brought back in two stages to the Oilfields where they remained until the end of the year. The reinforcements provided by the Sarawak Constabulary did very good work and fully justified their move in aid of the Brunei Police.

The Establishment and Strength as at 31.12.53 are as follows:—

<i>Rank</i>	<i>Approved Establishment</i>	<i>Actual Strength</i>
Gazetted Officers	... 4	4
Inspectors	... 8	8
Sergeant Majors	... 3	3
Sergeants	... 15	10
Corporals	... 20	17
Lance Corporals	... 30	21
Constables	... 226	156
A. P. O. s	... —	29
Civilians (Clerical Service)	... 12	12

Health:

The health of the Force remained average when compared with previous years. The number of men who reported sick necessitating time off was 199. The number of days lost through sickness was 400.

Discipline:

The incidents connected with the Brunei Film Production Company and subsequent events revealed a lack of discipline mainly among the younger constables of the Force. Nine men were dismissed for misbehaviour connected with these incidents. Four others were dismissed for sleeping on duty; one for making a false declaration; one discreditable conduct; and one after a conviction in court for theft. After the dismissals discipline appeared to improve, especially in Seria Police Station. Towards the end of the year, however, a deterioration of discipline and morale in the Kuala Belait Police Station became apparent. The causes were under enquiry at the end of the year.

Figures for major and minor disciplinary offences by quarters are as follows:—

1953	Major Offences	Minor Offences
1st Quarter—January to March	72	29
2nd Quarter—April to June	52	16
3rd Quarter—July to September	23	16
4th Quarter—October to December	7	3

Recruiting:

Up to the end of September only ten recruits were forthcoming. By a fortuitous circumstance, however, during October, twenty-five Dayaks of a suitable standard applied for admission to the State Police. This represents a considerable percentage increase on the strength of the Force and has served to some extent to correct a state of affairs which was causing some anxiety.

Training:

During the first quarter it was considered advisable that all training of Brunei recruits should be done in the Police Training School at Kuching, and on the 10th March, 1953, seventeen recruits were sent to Kuching to complete their training. All subsequent enlistments were sent to Kuching.

A considerable amount of post-recruit training was carried out by officers and inspectors of their own men.

The range at Tutong was completed towards the middle of the year and by using the range at Miri, it was found possible to prac-

tise nearly all the men in the Force in the use of the rifle. A number of N.C.O.s. fired sten machine carbines on these ranges.

Other training took the form of security exercises and riot drill. Five men undertook a course under the State Wireless Engineer for W.T. operators and at the end of the year extensive training was given to men in Seria and Kuala Belait Police Stations in the use of the sets to be used for mobile radio patrols. Courses for prospective drivers were held at Seria Police Station.

Transport:

The number of police vehicles in use at the end of the year was as follows:—

- 7 Land-rovers
- 2 Troop carriers
- 4 Motor-cycles

Of these only 3 Land-rovers and 3 Motor-cycles were in really serviceable condition. Adequate provision, however, has been made for 1954.

Housing and Building:

During the year the following police buildings were completed:—

KUALA BELAIT

- One block of six married quarters.
- One canteen.

SERIA

- Two blocks of ten married quarters.

BRUNEI

- Police Headquarters building—occupied on 1.6.53.

The fencing of Kuala Belait Headquarters was completed and renovation work was carried out on a six-door block transferred from the Customs Department.

Work on the Field Force barracks at Mile 6½ on the Seria/Kuala Belait road commenced in the last quarter and a fair degree of progress had been made by the end of the year.

Signals:

The existing sets at Kuala Belait and Brunei continued to give fairly satisfactory service, although the efficiency of communications with Kuching was somewhat variable owing to atmospheric conditions; new sets are on order.

During the last quarter of the year, six "19" sets were obtained on loan hire terms from the military authorities in Malaya. By the end of the year tests had been carried out, but owing to changing atmospheric conditions and local interference from industrial installations results were not entirely satisfactory. Everything possible is being done to improve matters.

Traffic:

An increase in the incidence of traffic accidents led in the last quarter of the year to the creation of a specialised Traffic Branch in the Oilfields area. This branch—under the command of a sergeant—does its own preventative patrolling, investigation of traffic offences and occasionally prosecutions. It is hoped to develop this important aspect of police work.

Accident statistics are as follows:—

- (1) Total number of accidents recorded was 153.
- (2) Total number of fatal accidents was 5 involving the death of 5 persons.

Of the total number of accidents, 121 occurred in the Oilfields area alone, and these may be classified:—

- 57 between vehicle and vehicle.
- 25 between vehicle and bicycle.
- 15 between vehicle and pedestrian.
- 24 miscellaneous.

Owing to the large import of new cars and the setting up of more taxi and bus services, the control of traffic is becoming an increasingly important problem in the Oilfields area.

Attention was paid during the last quarter of the year to traffic legislation and recommendations were made regarding the introduction of new legislation with the object of providing the police with more adequate powers to exercise control.

Crime:

There were two interconnected cases of outstanding importance during the year.

On 29.1.53 eight persons were prosecuted for taking part in an unlawful assembly in Brunei Town and received sentences varying from terms of imprisonment of six months to fines.

On 5.10.53 three persons—including one of those who had been sentenced in the first case—were prosecuted on various counts of conspiracy to alter by force the constitution of the State and were sentenced to terms of imprisonment of two years and one year.

During the first quarter of the year a spate of housebreaking at Seria was halted by the arrest and conviction of a notorious thief.

A murder occurred in the Tutong area in May and a conviction was obtained.

During November, police activity in the Seria/Kuala Belait area resulted in the arrest of a number of thieves and the clearing up of about twenty outstanding cases of theft. Three persons have been convicted and four were awaiting trial in this connection at the end of the year.

Excluding traffic offences a total of 344 true reports of crime were made to police stations. Of these 122 were convicted and 54 acquitted. The number of reports in respect of house-breaking and theft in a building amounted to 37; a comparative figure for 1952 is 35. Total thefts amounted to 59. Attached at Appendix "K" are more detailed crime statistics.

Aliens' Registration and Immigration:

During the year 898 aliens registered. The numbers of other documents issued by the Immigration and Aliens' Registration Departments are as shown below:—

(1) Full Visas and Transit Visas	...	...	1,761
(2) Certificates of Identity (British Subjects and Subjects of H.H. the Sultan)	...	...	1,544
(3) Emergency Certificates	...	...	153
(4) Police 64 for non-British Subjects	...	...	456
(5) Special Passes	...	...	567
(6) Aliens' Registration Certificates	...	...	2,830

The total numbers of immigrants and emigrants crossing the borders of the State during the year are as follows:—

		<i>Male</i>	<i>Female</i>
Immigrants	...	19,540	7,221
Emigrants	...	17,524	6,847

There was a very large increase in the number of travellers to and from the State owing to some extent to the announcement of the Brunei Government Five Year Development Plan. Much attention had to be paid to the scrutiny of applications of persons wishing to enter the State in order that none should become an economic burden.

The following comparative figures of persons travelling to and from Brunei Town and Labuan are of interest:—

<i>Date</i>		<i>Inward</i>	<i>Outward</i>
1951	...	2,731	3,090
1952	...	5,789	6,504
1953	...	12,018	10,601

Figures concerning persons travelling to and from China during the year are as follows:—

		<i>Returned to China</i>	<i>Returned from China</i>
(1) Total	...	27	1
(2) Total number in age group 16-30	...	9	—
(3) Total number of family groups	...	—	—
(4) Number of granted re-entry permits	...	3	—

A great deal of back documentation work was done by the Immigration Department during the year, especially with regard to aliens and to persons who had entered the State illegally, twenty-one of whom have been repatriated.

C.I.D. and Special Branch:

This body continued to function as previously. Great strides were taken in improving records, but it was obvious that some change had to take place if the executive branch were to keep up

with the increasing political and criminal problems. It was, therefore, decided to effect a complete reorganisation of the special branch and at the end of the year plans were well under way.

Welfare:

Canteens at Kuala Belait and Seria Police Stations were opened during the course of the year and can provide amenities of a very satisfactory nature to those who patronise them. The finances and administration of these canteens and also of the one at Brunei were put on a more satisfactory basis during the course of the year.

Steps were taken in the last quarter of the year to organise a Thrift and Loan Society for all ranks of the police.

Association football continues to be the main outside sport. The Police Football team representing the Belait District are doing very well in local competitions.

Societies:

Ten societies were registered during the year.

General:

The year was one of fruition of building and other structural schemes. Improvement of organisation and training were somewhat hindered by political developments during the year. Plans were drawn up, however, which should put our organisation on a much sounder basis in 1954.

Mr. P. E. Turnbull, Superintendent, (now Assistant Commissioner), who relinquished command of the Force in March, 1953, attended the Coronation Parade in London and was subsequently awarded the Coronation Medal at Buckingham Palace.

Prisons:

The prison in Kuala Belait Police Station remained the main place of detention. The prison building at Jerudong was completed half-way through the year. It was thought at this time that the prison would be urgently required and temporary warders' quarters were erected. The need for this prison, however, did not materialise and at the end of the year the prison at Jerudong had not been put into use.

Some improvements to the prison at Kuala Belait were made. There were 127 prisoners received during the year, the daily average prison population being 16.

Classification of prisoners by race was as follows:—

Chinese	...	...	94
Malays	...	...	27
Indians	...	...	4
Dayaks	...	...	2

Classification by age groups was as follows:—

Under 20 years	...	10
20—25	„	17
26—30	„	6
31—40	„	26
41—50	„	42
Over 50	„	26

Classification of sentences was as follows:—

Under 1 month	...	79
1—3 months	...	33
3—6	„	7
6—12	„	3
12—24	„	4
Over 2 years	...	1

Chapter X.

PUBLIC WORKS AND UTILITIES

PUBLIC WORKS.

General:

The total expenditure of the Public Works Department during 1953 was \$12,250,197. This compares very favourably with the sum of \$7,804,168 spent during 1952. The total financial provision for the year 1953 was \$15,881,861 so that 77% of the programme was fulfilled compared with 67% during 1952.

During the year a plan was formulated for the development of the State during the next five years at a cost of \$100,000,000 the bulk of which amount will be administered by the Public Works Department. The main features of this plan in relation to the P.W.D. are the construction of an adequate road system, improvement of water supply and electricity services, the drainage and reclamation of land, sewerage of the main towns, and an extensive building programme. It is proposed to start on some of this work early in 1954.

Labour:

The labour position eased still further during 1953, but there remains a shortage of skilled men. The purchase of approximately \$1,000,000 worth of heavy earthmoving equipment has reduced the Department's dependence on labour and a great deal more work has been carried out by using this equipment than would have been possible otherwise. Local untrained and unskilled men have shown great aptitude in the operation and servicing of this heavy equipment and great credit is due to them as also to their instructor the Engineer-in-Charge Heavy Equipment, who was recruited during the year from Australia.

Contractors:

The position regarding contractors has improved considerably during the year and it has been found possible to carry out many more contract works. Competition between the different contractors has helped to lower building costs slightly during the latter part of 1953. Difficulty is still being experienced in finding contractors willing to work in outlying districts, and there still remain many buildings to be done in these places for the Education, Agriculture and Forestry Departments. Many of these buildings are urgently required and it is hoped to have them constructed during 1954 by prefabrication in Brunei or Kuala Belait, leaving only the erection work to be done in the site.

The State has now appointed a firm of Consultant Architects and commissioned them for some of the larger buildings. This will considerably relieve the pressure on the P.W.D. staff. The Consultant Architects are in charge of work on the New Mosque and the New English Schools at Seria and Brunei as well as Customs Stations at Kuala Belait and Brunei Town.

Staff:

During 1953 there was an improvement in the Staff position but the increasing amount of work has meant that the Department is still short staffed. Mr. G. T. Myles, B.A., B.A.I. (Dublin) A.M.I.C.E., was seconded from the Sarawak Establishment early in 1953 to be State Engineer, Brunei, which position he filled until going on furlough in April when Mr. W. N. Watterson, M.A. (Cantab) again acted as State Engineer until Mr. Myles return in November. Mr. P. G. Lindsay, Dip. C.E. (Sydney) was transferred from Brunei to Kuala Belait in January, 1953 and remained there during the year. In October, Mr. W. C. Wilkinson was appointed as Engineer-in-Charge of Heavy Equipment, and he has been responsible for the maintenance and training of operators in the Heavy Equipment Section. In October, Mr. D. J. Causby, E.E. (Adelaide) an officer newly appointed to the Sarawak Establishment was seconded to Brunei and did duty in the Brunei District.

During 1953, two Senior Technical Assistants and one Technical Assistant were appointed and also three new members of the Clerical Staff. Negotiations are in hand for more Technical

Staff from Hongkong and it is hoped to obtain their services early in 1954. The Department is greatly understaffed for the amount of work planned for the future and it is therefore hoped that a considerable increase in the staff will be possible during 1954. Great credit is due to the existing P.W.D. staff for accomplishing what they have in 1953.

British Malayan Petroleum Co., Ltd.

During 1953, the B.M.P. Co., spent \$34 millions on capital construction and production facilities. This was 98.6% of the planned target and an increase of 50% overall on the expenditure for the previous year.

New projects completed within this cost included nearly 400 new oilfield homes, a new senior staff school, new fire station, new field transport yard and buildings, roads at Klias, Lumut and Labi and a new transport camp at Labuan. One hundred and twenty-four houses received major overhauls and 140 Kajang buildings and 51 labour lines were re-roofed. More than 5,544 acres of grass was kept out and well over 45,000 cubic yard of general rubbish was removed and disposed of in the clean up operations.

Approximately \$18,000,000 was paid out by the Company in wages compared with just under \$14,000,000 the previous year. Although the average take home pay of each employee was higher than in 1952 the cost of living index in the Seria area fell quite appreciably for the Labour Force and the Regional Staff. The total number of employees at the end of 1953 was 5,563 compared with 4,548 for 1952.

MATERIALS

Stones:

For the Department's and contractors' use, larger amounts of stone will be necessary in the future particularly for the road-work envisaged under the Five Year Development Plan. The existing supply of stone from Butir would be quite inadequate for the growing needs of the State, and it has therefore been decided to open up the sandstone gravel deposits at Brakas beach, 9 miles from Brunei. These deposits consist of rounded sandstone

pebbles graded from 6" down, and are similar to those now being worked at Butir but contain less sand and no clay and should therefore be easier to work. The Brakas quarry is being made accessible by road, and this will result in a saving of time and money compared with the transport of stone from Butir by boat. In order to make the Brakas quarry more accessible the existing road to Brakas beach is being widened and reconstructed and a new road is being built to the main deposit about one mile to the South East of where the present road meets the beach.

Samples of this stone have been sent to the Road Research Laboratory in England for testing to ascertain their suitability for roadstone and concrete work. The results of this test show that although the material is by no means first class, it should be adequate for the purpose and should prove more satisfactory than the present supply from Butir. It is proposed to crush some of the stone near the quarry site and transport it from there to the various jobs, but a proportion will be used for road bases without crushing.

Timber:

Supplies of timber have improved considerably during the year, but most of the best quality hardwood is still imported. It is anticipated that with the roads programme under the Five Year Plan large areas of good hardwood will be made accessible. Belian attaps are now in much more plentiful supply but these are all imported from Sarawak.

Bricks:

The supply of bricks from Soon Lee Brick Factory at Mile 10 Tutong Road improved considerably and at the end of the year it was possible to fulfil our requirements from this source. At the beginning of the year, cement bricks were imported from Jesselton for the new Government Offices.

Cement:

Ample supplies of cement were available during the year both from the United Kingdom and Hongkong. There was a downward trend in the prices.

Sand:

There are ample supplies of sand available in the State, but it is much too fine for good quality concrete work. Stone dust from the existing stone crushers, although of better quality, is, not produced in sufficient quantities. It is hoped to solve this problem by mixing the increased quantity of stone dust anticipated during 1954 with the fine sand so as to give a coarser mixture.

Coral:

This has been used a great deal in the base course of roads in the past, but because of the large volume of voids and the resulting loss of volume on compaction it is found rather expensive. It is hoped to use the stone from Brakas Quarry when it is developed, and to eliminate the use of coral altogether.

ROADS, STREETS AND BRIDGES***Tutong Road:*** (Brunei to Tutong, 30 miles)

A considerable amount of work has been carried out along the Tutong Road during 1953. Much of the existing 8' wide carriageway has been widened to 18' corners eased to give better alignment and vision and some of the more severe grades eased. On the advice of the Colonial Liaison Officer of the Road Research Laboratory who visited Brunei in May, the banks cut were terraced and planted with turf as an anti-erosion measure.

The amount of earthwork involved was approximately 19,000 cubic yards. Blocking of the road to the full 18 feet carriageway width was carried out for 1.6 miles. Grouting of the road was done for 2.8 miles, and surfacing for 2.5 miles during 1953.

Brakas Road: (Brunei to Brakas Beach, 9 miles)

Towards the end of 1953, a major reconstruction of the Brakas Road was started, in order to make the Brakas Quarry more accessible from Brunei. This involved heavy cutting on some of the hills and a considerable amount of fill in the swampy portions. The base course of the greater portion of this road when constructed will be of gravel from the Brakas deposits.

Approximately 40,000 cubic yards of earthwork has been carried out during 1953. Blocking of the road with coral was done for a length of 2 miles, and the road was grouted for a length of 0.9 miles. Drains were excavated along the side of the road for a length of 3.02 miles.

Jerudong Road: (Mile 10 Tutong Road to Jerudong Beach 5 miles)

This road to the beach at Jerudong from Mile 10 Tutong Road was almost completed as an earth road during 1953. Cuttings were made through some hills to give a better gradient, and the banks of these cuttings were terraced and turfed as an anti-erosion measure.

Approximately 6,000 cubic yards of earthwork was carried out in 1953. Two 20 feet standard wooden bridges were completed. Along the beach tree trunks and debris were cleared for a length of $\frac{1}{2}$ mile, and three week-end chalets were constructed.

Muara Road: (Brakas Road to Muara, 12 miles)

Approximately 16,000 cubic yards of earthwork was done along this road during 1953, mainly in widening the formation and cutting back hillsides. One reinforced concrete bridge 20 feet by 20 feet was constructed.

Kuala Abang Road: (From Mile 18 Tutong Road to Lamunin, 10 miles)

Very little work apart from maintenance was done on the Kuala Abang Road during 1953. A small amount of filling was done along the swampy portions of the road.

Access Road to Rifle Range, Tutong:

A new road of waterbound macadam was constructed to give access to the new Rifle Range, from the Tutong Road. The length of this road was 1.03 miles and the width 20 feet.

Brunei Town Roads:

More roads were constructed in the Brunei Town area during 1953, than was possible in 1952. Most of the roads around the shophouse area have been completed as far as is possible until the new shophouses are constructed.

The following road work was done in the Brunei area during 1953.

<i>Name of Road.</i>	<i>Blocking</i>		<i>Grouting</i>	
	<i>Length (miles)</i>	<i>Width (feet)</i>	<i>Length (miles)</i>	<i>Width (feet)</i>
1. Jalan Sumbiling (1,000 cubic yards fill) ...	0.34	18	—	—
2. Jalan Tasek ...	0.18	18	—	—
3. Jalan Tutong ...	0.02	32	0.07	23
4. Jalan Chevallier ...	—	—	0.08	18
5. Jalan Cator ...	0.01	21	0.07	21
6. Road to Class F Quarters by English School ...	0.15	18	—	—
7. Jalan Elizabeth II ...	—	—	0.16	24
8. Road to Istana Office ...	—	—	0.04	11
9. Jalan Kianggeh ...	0.13	48	0.06	71
10. Road to State Survey Office ...	—	—	0.08	9
11. Road to Nurses Hostel ...	0.02	10	0.02	10
12. Jalan Sultan ...	0.10	24	—	—
13. Road to New Wharf ...	0.03	30	—	—
14. Jalan McArthur ...	0.07	44	—	—
15. Road to Garage (D.P.P.) ...	0.01	8	0.01	8
16. Road to Government Rest House ...	0.08	12	—	—

Materials used on roadwork in the Brunei, Muara and Tutong districts were as follows:—

Coral Blocks ...	11,729 cubic yards.
Stone ...	3,500 „
Asphalt ...	1,472 barrels.
Colas ...	1,195 „

Kuala Belait District:

A total length of 2.2 miles of sand road was constructed during 1953. Of this, 0.3 miles has been metalled in preparation for 18 feet carriageway. The B.M.P. Co., constructed 0.8 miles of this road using 15 cubic yard Tournapulls. New earth drains for the above roads were opened, and an average depth of approximately 2 feet of sand fill was used to bring the roads above highest tide level. The B.M.P. Co., have now completed an

access road to the foot hills near Sungei Lumut. This road finishes approximately 7 miles East of Anduki and will form part of the proposed Brunei-Kuala Belait Trunk road. The B.M.P. Co., have now built and maintained 15 miles of road from Kuala Belait to Anduki which but for 200 yards is surfaced with 18 to 20 feet bitumin carriageway.

Town Roads Kuala Belait and Seria:

During 1953, bitumin roads were constructed as follows:—

1. Town Roads 24 feet wide	...	...	0.32 miles.
2. Town Roads 20 feet wide	...	...	0.09 miles.
3. Town Roads 18 feet wide	...	...	0.10 miles.
4. Town Roads widening 8 feet wide	...	...	0.01 miles.
5. Access Roads to Quarters 18 feet wide	...	...	0.28 miles.
6. Access Roads to Quarters 12 feet wide	...	...	0.14 miles.
7. Access Roads to Quarters 8 feet wide	...	...	0.16 miles.

Total	1.10 miles.
-------	-----	-----	-------------

Concrete roads constructed in 1953 for the Kuala Belait and Seria shophouse areas were of three carriageways, 18 feet, 24 feet and 18 feet. The two 18 feet carriageways being for parking and one way traffic, and the centre 24 feet carriageway for through traffic in both directions. A total length of 0.28 miles was constructed during 1953.

Concrete Drains:

Brunei Town—Concrete drains were laid in the town area in front of and behind the shophouses, and passed the hospital. The lengths laid in 1953 were as follows:—

Roadside Drains	...	...	...	4,588 feet.
Backlane Drains	...	...	...	1,050 feet.

Kuala Belait & Seria—It was not possible to do much of the major drainage work urgently required in these areas, owing to the lack of an accurate detailed survey of the area, which has virtually no fall. When staff are available this survey will be carried out.

Concrete drains completed during 1953 were as follows:—

5,875 lineal feet of 1'-0" half round precast drains.

2,200 lineal feet of 2'-0" half round cast in situ drains.

112 feet 3'-0" cast in situ.

174 feet 3'-6" cast in situ.

200 feet 2'-0" × 2'-0" concrete box culvert was laid and approximately 300 feet of precast concrete pipe culverts were installed ranging in size from 1'-0" to 4'-0" diameter.

Bridle Paths:

A new bridle path was constructed from Buang Sakar to Kasat, a distance of 2½ miles and routine maintenance carried out on all existing bridle paths.

Clearing Rivers:

More work under this heading was carried out in 1953 than in 1952 due to increased provision in the estimates. This has prevented a considerable amount of flooding during heavy rains.

Rivers cleared during 1953 were as follows:—

Tutong Road.

Sungei Kelakas	...	...	...	0.62 mile.
Sungei Melaut	...	...	...	1.36 miles.
Sungei Damuan	...	...	...	0.62 mile.

Brakas Road.

Sungei Brakas	2.69 miles.
---------------	-----	-----	-----	-------------

Jerudong Road.

Sungei Kenipahan	...	...	...	0.62 mile.
Sungei Peninjau	...	...	...	0.62 mile.

Total	6.53 miles.
-------	-----	-----	-----	-------------

This compares with 1.36 miles cleared during 1952.

Reclamation:

Brunei Town—Considerable amount of fill were required during the year for reclamation swampy land for building sites, and building up of low lying ground at the new airfield site, and at the Malay School area. This was obtained from a hill in the

Tasek area, and approximately 85,000 cubic yards of earth were removed.

This hill was used in the following places:—

New P.W.D. compound	25,000 cu. yds.
New Malay School Padang	16,000 cu. yds.
New Airstrip	16,000 cu. yds.
English School site & New Class F Quarters	14,000 cu. yds.
English School site & New Class F Quarters	14,000 cu. yds.
Building site at Tongkadeh Bridge ...	12,000 cu. yds.

In order to reclaim more land for the new P.W.D. compound and the proposed site for the new power station, Sungei Tasek was straightened for a length of approximately 1,000 feet, and filling of the old meandering river bed is expected to start early in 1954.

Kuala Belait & Seria—By far the most important item of work in the P.W.D. in this area is the reclamation of swamps. All building sites, roads, and drainage work are dependent on first raising the level to above high water mark. During 1953, 140,000 cubic yards of sand were taken from the beach for this work.

For the most part this work was done by a local contractor at a cost of between \$1.50 and \$1.65 per cubic yard, depending on the site. Coolies loaded the sand and ancient but effective four wheel drive lorries carted the sand, and levelled and consolidated the fill. During the year approximately \$10,000 was spent in bulldozer hire, for clearing sites of heavier vegetation, and without this the sites for Senior Officers Quarters, and important Police Field Force Barracks would not have been started. The co-operation of the British Malayan Petroleum Company in granting hire of the bulldozers was much appreciated. In November, one bulldozer and one mechanical loader were allocated to Kuala Belait, so that bulldozer hire was eliminated and mechanical loading was introduced. This proved effective in the reduction of loading costs from 70 cents to 40 cents per cubic yard.

However, the taking of sand from the edge of the vegetation was found to cause undermining, and the sea encroached on the coast line at high tides. A temporary ordinance was introduced

prohibiting the taking of sand within 70 feet of the edge of the vegetation, or further than 100 feet from the edge of the sea. With the introduction of this ordinance the contractor stopped work as the coolies refused to dig the firmer sand at the edge of the sea. This indicates a necessity for further mechanical loading equipment in 1954.

River Wall Kuala Belait:

The river wall retaining the reclaimed foreshore of the Belait River started to fall in December 1952 during heavy rains, due to the seepage of sand under the foundations. Many alternative designs for a new retaining wall were considered during the year and preference finally given to a design involving precast concrete sheet piles jetted into position. Construction should be effected in 1954.

Wharves & Jetties:

During 1953, a 200 feet extension to the existing reinforced concrete wharf at Brunei was completed. Work was begun on Ferry Loading Ramps at Tutong and Danau. These are of reinforced concrete and with the new vehicle ferry "Higgins" will replace the existing primitive ramps and ferry. This will make the crossing of the Tutong River much safer and very much faster. A new reinforced concrete wharf commenced in 1952 was completed in 1953 at Kuala Belait.

Construction of Rifle Range:

A rifle range was constructed for the Police Department about two miles from Tutong. This range is 1,200 feet long and 240 feet wide, with four firing points 80 feet long and 10 feet wide.

WATER SUPPLIES

Brunei Town:

Water supply in Brunei Town caters for 240 Government Quarters, apart from the Government Offices, Hospital, Resthouse, Slaughter houses, Markets and other public utilities. Supply is also provided to 248 private consumers, and 12 stand-pipes provide water to the kampongs in and around Brunei Town with exception of the River Kampongs. All the private supplies are metered, but a great wastage occurred with the stand-pipes pro-

vided for the kampongs and contractors use. These latter are now being metered and provided with a free ration under the contract, above which they have to pay.

The consumption of water in Brunei Town has trebled within the last 5 years as can be seen from the figures below.

1949	...	95,233	gallons per day.		
1950	...	122,027	"	"	"
1951	...	123,131	"	"	"
1952	...	239,670	"	"	"
1953	...	288,874	"	"	"

The town water supply consists of one major and six minor supplies. Of the latter two cater for Government Quarters and the remainder supply the River Kampong, who collect the water by prahu from supply points on the mainland.

The major supply is from Tasek stream about $1\frac{1}{4}$ miles from the centre of the town. A dam erected just over the waterfall impounds approximately 500,000 gallons, and the supply is carried to the town by an 8" pipeline which extends up to 4,100 feet from the dam. At this point it branches off into two six inch lines which run parallel until at 5,000 feet they diverge to form what will eventually be a ring main round the town for a total distance of 11,340 feet. Only about 440 feet of this ring main remains to be completed but this will be delayed until the removal of some temporary shop houses which obstruct the route. A number of Kampongs within the Sanitary Board area are supplied from this main as also is the Kumbang Pasang area.

With a view to extending the supply from the Tasek stream investigations are now in hand to consider the erection of an impounding dam capable of holding about 30,000,000 gallons of water above the Tasek falls. Although the existing supplies are just adequate for present needs they are expected to be insufficient for the rapid development of the town, and the abnormal increase in consumption which rose from 95,233 gallons per day in 1949 to 288,874 gallons in 1953. The catchment area of the Tasek stream is a valley hemmed in between two long ranges of steep hills, and the flow is rather sluggish except for intermittent falls ranging from four to six feet.

The installation of four pressure filters each capable of filtering 9,000 gallons per hour, and the erection of a pure water storage tank of 360,000 gallons capacity has been approved and these are under contract to a United Kingdom company. Provision has also been made for the addition of two more filters and a 50% increase in storage capacity for later demands when necessary.

All but one of the minor supplies are from small streams in the hills near the town. The remaining one is on the opposite side of the river, but during severe drought this dries out completely.

Water supply Temasek:

The supply to the Istana Darul Hana and the Rest-house annex was maintained satisfactorily during the year. A supply to the First Minister's house was installed from this source involving 1,100 feet of 1½" pipe.

Water Supply Kilanas:

The supply to Kilanas was extended to provide a 1 inch branch line 462 feet long to the new kitchen for feeding school children.

Water Supply Jerudong:

The supply for the new prison and police barracks at Jerudong is now being obtained by damming a stream nearby, and pumping the water through 500 feet of 2" pipe to a 2,400 gallon tank. Advantage was taken of this source to connect a new 4" line to the police station, and a 2" extension of this line 357 feet long to the school and quarters at Sengkurong.

Water Supply Tutong:

The existing supply at Tutong was maintained satisfactorily during the year. A new source of supply is being investigated and this will form part of the Five Year Development Plan.

Water Supply Muara:

Improvement of this supply is in hand and a tank of 10,000 gallons capacity has been installed to serve the town and the new High Commissioner's Lodge. A pump is to be installed to raise

water from a 100,000 gallon reservoir to the tank, from where the distribution mains consist of 4 inch asbestos and 3 inch galvanised pipe.

Water Supply Bangar:

The existing supply to Bangar is quite inadequate in time of drought and a pipeline is now under construction from an additional source.

Work Completed During 1953:

Apart from the work mentioned previously the following was done during the year.

Supply to Kampong Batu Marang involving the laying of 60 feet 4" pipe and 380 feet 3" pipe, 2,546 feet 2" pipe, 968 feet 1½" pipe and 1,533 feet of 1" pipe.

In Brunei Town replacement of old mains was done involving laying 1,346 feet 6" pipe, 2,952 feet 3" pipe, 2,0671 feet 2" pipe and 797 feet 1½" pipe.

Fifty connections were made to new Government Quarters during the year and 63 connections to private quarters including the new shophouses.

Twenty-one disconnections were also made consequent on the dismantling of the old shophouses.

Seven new standpipes were erected for the benefit of kampong people, 6 for Government utility purposes and 26 to contractors doing Government work.

Almost all supplies to Government Quarters including internal plumbing were done Departmentally during the year, but recently the system of having these done by the contractor when building the quarters, has been used.

Water Supply Kuala Belait and Seria:

Existing services were maintained and connections made to new buildings during 1953. Pipes and storage tanks have been ordered for the new supply for the Kuala Belait and Seria Municipal Areas.

The water for this scheme will be supplied by the B.M.P. Co., from their water treatment plant at Seria. From the treatment plant, the water will be pumped to separate high level service tanks in Kuala Belait and Seria, and from these the water supply to the consumers in each town will be by means of 8", 6" and 4" diameter reticulation mains.

Gas Supply:

This is confined to the Seria and Kuala Belait areas where the natural gas from the oilfield is used. Two hundred and thirty-eight Government Quarters are supplied and 70 private consumers. The generating set used for lighting the old shop-houses at Seria is powered by natural gas.

Electricity Department:

The Electrical Department operates two power stations in the State, one at Brunei and one at Kuala Belait while the electricity supply for Seria is purchased from the B.M.P. Co. The power generated for these three towns is 400 volts 50 cycles 3 phase 4 wire. Supply to consumers is 230 volts.

At present the demand for electricity is rapidly increasing and all existing plant will be fully loaded. Plans are now under consideration for a central power station situated in the Seria area to supply electricity to the whole State. This will be a long term project and interim steps are being considered for provision of sufficient electricity until the central power station can be brought into operation.

Brunei Town:

One new 150 KW. generator was installed during the year in Brunei Town which means that this power station now has two 75 KW., one 22 K.W., and one 150 KW., generators. The total capacity of the station is 322 KW. and the effective plant capacity is 172 KW. as against which the peak load reached a maximum of 220 KW. with a load restriction of 60% imposed on consumers. The plant has given good service during the year with only a small number of minor breakdowns. General overhaul of the two 75 KW. generating sets was carried out.

A comparison of the statistics for the years 1952 and 1953 shows the development of the electricity undertaking during the year.

	1952.	1953.
Lighting consumers	... 465.	542.
Power consumers	... 122.	154.
	<hr/>	<hr/>
TOTAL	... 587.	696.
	<hr/>	<hr/>
Total units generated	... 606,590	817,561
Total units sold	... 479,451	593,692
Total units used in works	... 9,986	7,632
Revenue per unit sold	... 22.5 cents	30 cents
Number of gallons of fuel used	47,833	51,930
Installed plant capacity	... 172 KW.	322 KW.
Minimum demand	... 165 KW.	200 KW.

Kuala Belait:

A new power station was opened in Kuala Belait which previously drew its supply from the B.M.P. Co., and two 75 KW and one 22 KW generating sets were put into commission in May. The total capacity is 172 KW and the peak load reached a maximum of 115 KW with a load restriction of 50% imposed on consumers.

There were thirty-five mercury vapour street lamps installed during the year. New consumers connected to the system were 8 shophouses one commercial undertaking and fifteen private houses. The total number of units sold was 144,332 and the revenue per unit sold 30 cents.

SERIA.

Supply of electricity to Government Quarters is undertaken by the B.M.P. Co., from whom the Government purchases in bulk and arranges its own distribution. The same system will apply when the new shophouses are completed, one half of them now having been constructed but not yet supplied with electricity. It is expected to receive a supply of up to 100 KW from the same source during 1954.

Laying of underground cables and overhead service mains for the new shophouses and Government quarters is now nearing

completion. During the year the total number of units purchased by the Department amounted to 817,561, an increase of 210,971 on the previous year.

P.W.D. WORKSHOP.

This Department is responsible for the operation of workshops in Brunei Town and Kuala Belait. In Brunei Town the workshop organisation maintained and repaired all Government vehicles, plant and machinery, while in Kuala Belait during 1953 maintenance and repair of all vehicles, plant and machinery, except for Police Department, was effected. Work for outside interests is also undertaken when possible without interfering with Government work. During the year a total of more than 100 vehicles and items of plant were maintained and repaired in addition to those owned by contractors on Government work.

BRUNEI TOWN.

The existing workshop buildings are very much overcrowded but during 1954 it is expected to have extensive new premises in the new P.W.D. compound in the Tasek area. The increased amount of maintenance caused by the large increase in new equipment required for the Five Year Plan, will be dealt with efficiently.

The staff have shown a great improvement in their work and in the interest of the Government. During the year two members of the staff were sent to Ipoh on a short term course and one of them returned with an excellent certificate. Further arrangements have been made to send two men to Singapore in January, and four more to B.M.P Co., Seria, two of whom are intended to complete a three year course in the Trade School.

A total of 72 vehicles and heavy equipment was purchased.

KUALA BELAIT.

A new wooden building 70 feet \times 18 feet was built in 1953 to replace the old pre-war structure 40 feet \times 20 feet, which was demolished to make way for a new road. The new building which will later be used as a garage is now utilised as a temporary workshop pending the acquisition and preparation of a site for

a large permanent workshop. P.W.D transport was much improved during the year with the advent of improved equipment such as tools, high pressure greasing and washing equipment, and mechanical workshop equipment, and an adequate supply of spare parts.

P.W.D. STORES.

During the year purchase amounting to \$560,000 passed through the Stores Account with issues of \$820,400 were made to the various services including \$160,000 to contractors. The balance of the value of stores at the close of 1953 was approximately \$593,000.

The supply position showed a considerable improvement over last year, and in general prices were cheaper. Contractors taking advantage of competition prices outside, depended less on the Store for their supplies this year. Also because of better delivery times, more materials could be bought and charged directly to the respective job, without passing through the Stores for subsequent re-issue. This accounts for the reduction in the purchase made this year.

Lack of storage spaces remained a serious problem and it could only be temporarily relieved during the year. It is hoped to solve this problem in 1954 with the development of the P.W.D. compound at Tasek.

BUILDINGS

BRUNEI TOWN.

All existing quarters in the Brunei, Muara, Tutong and Temburong Districts were maintained in good repair during the year. Repainting of the State Hospital and Government quarters continued during the year, and will continue for probably the next two years, as many quarters require repainting because of the small provision made for this in past estimates. A total of approximately \$232,400 was spent on maintenance of existing quarters during the year.

All works, except the New Government Offices, in progress at the end of 1952 were completed during 1953. Completion of

the offices is expected early in 1954. Many new works could not be started early in the year because extensive site preparation was required. The heavy equipment ordered for this work arrived about midway of the year, and although it was put to work immediately building work could not be started on the sites until August. The preparation of new buliding sites is still a major problem because of the number of other priority works requiring heavy equipment. It is hoped that this position will be eased in 1954 with the purchase of new equipment and by release of equipment from other jobs.

During the year several new types of house were constructed as experiment. With the large numbers of staff expected to arrive for the Development Plan more houses, easily and quickly erected and at relatively low cost, are required.

After the publication of the Five Year Development Plan a large number of experience contractors applied for registration in the State. Considerable progress is expected in 1954 with the increase in numbers of experienced contracting firms from abroad.

KUALA BELAIT AND SERIA.

All outstation schools and quarters were repaired and repainted during the year. The Rest-houses at Kuala Belait and Labi were redecorated and also the schools at Kuala Belait and Seria. All quarters in need of painting or repairs in Kuala Belait were completed and all but two blocks at Seria. The Government buildings in the Belait District are now presentable in appearance and by keeping a gang of three men permanently cleaning the buildings and reporting defects, it is hoped to keep them this way.

For details of buildings completed and under construction during 1953, see Appendix "O".

Chapter XI.

COMMUNICATIONS

Shipping:

Brunei Ports, commencing from the western end of the State are as follows:—

Kuala Belait:

Kuala Belait situated on the right bank of the Belait River about half a mile upstream from the River mouth.

Facilities:

There are four wharves in Kuala Belait, the longest of which is steel-piped sand filled of approximately 375' in length and is owned by the British Malayan Petroleum Company. This wharf is used mainly by the Company's vessels,—commercial and other craft proceeding direct to the two Government wharves situated slightly further upstream. The two Government wharves, one of which is timber and the other a recently completed reinforced concrete wharf, are both 72' in length.

The total affective length of wharfage in Kuala Belait is 631', 75% of which belongs to the Company.

Fresh water is not available to shipping in Kuala Belait, and vessels using this port obtain supplies of fresh water from Brunei, Miri or Labuan.

Fuel oil is obtainable in 44 gallon drums, and a limited supply of fresh and dry provisions are available.

There are two cranes on the Company's wharf one of which has a lifting capacity of 20 tons.

A number of Straits Steamship coaster type vessels ply regularly between Kuala Belait and Labuan, but the bulk of the cargo loaded at this port is consigned to the British Malayan Petroleum Company, and carried on their fleet of L.C.Ts.

A considerable number of Native craft operate from Kuala Belait and carry local produce and merchandise up and down the Belait river and on short coastal voyages. The numbers of these craft licensed in Kuala Belait during 1953 are as follows:—

Private	...	60
Cargo	...	15
Passenger	...	17
		<hr/>
TOTAL	...	92
		<hr/>

Tutong:

Tutong, situated on the northern bank of the Tutong River about 8 miles from the entrance.

Facilities:

As the Tutong River is navigable by small Native craft and very light launches only, no facilities are provided for shipping at Tutong village. The village, which is on the main road between Brunei Town and the Oilfields, possesses a 20' long wooden wharf and is used mainly by outboards and Native craft which ply between Danau and Tutong and the upper reaches of Tutong River. Native vessels licensed in Tutong in 1953 were as follows:—

Private	...	42
Passenger	...	5
		<hr/>
TOTAL	...	47
		<hr/>

Muara: (Brooketon)

Muara, (Brooketon) situated on the western shore of Muara Harbour.

Facilities:

A small wooden pier with a depth of 7' alongside exists at Muara, and the harbour provides a completely sheltered anchorage in depths of from 3 to 8½ fathoms. The pier is mainly used by fishing perahus and small local trading craft, and is not provided with fresh water supply for shipping.

Fuel and oil are not available in Muara but small quantities of dry provisions may be obtained in the bazaar.

Approval has been obtained by a private concern to re-build the former Government slipway which succumbed to the ravages of time and hard work in 1952. On completion of this new project in mid-1954, it is anticipated that this slipway will be capable of handling vessels of up to 200 tons, and engine and hull repairs will also be taken in hand.

Native craft licensed in Muara during 1953, were:—

Private	...	24
---------	-----	----

Brunei Town:

Brunei Town, situated about 9 miles up river from the Inner Bar where the Brunei River enters Brunei Bay.

Facilities:

A 200' extension to the reinforced concrete wharf was completed in September, 1953. The original wharf is to undergo repairs in 1954, on completion of which Brunei Town will possess 400' of 1st class reinforced concrete wharfage.

Fresh water is available for shipping from three different water points on this wharf but only a limited supply of fuel oil can be obtained in the town.

Fresh and dry provisions are obtainable, but only minor engine repairs may be effected.

There is no slipway in Brunei Town.

Shipping requiring heavy lifts have to rely on their own derricks, but a mobile crane with a maximum lift of 10 tons has been ordered, and delivery is expected early in 1954.

As the bulk of general cargo for Brunei is transhipped at Labuan, regular services are maintained by a number of Straits Steamship Company's coaster type vessels, who work a shuttle service between Labuan and Brunei, and other ports in Brunei Bay.

During the year the total tonnage of cargo carrying shipping handled alongside Brunei Town quay amounted to some 100,476 tons. This was made up as follows:—

Straits Steamship Co.	...	19,766 tons
B.M.P. Co., Ltd.	...	31,603 „
Miscellaneous	...	49,107 „

TOTAL	...	100,476 NRT,
-------	-----	--------------

which shows an increase of 13,313 NRT on 1951 figures. This total does not include some 36,500 tons of Native craft of all types which used the port in 1953.

A bi-monthly service from Singapore to Brunei is also maintained by the North Borneo Trading Company's vessel M.V. "Pertama" and a direct Singapore-Brunei run is made each month by one of the larger Straits Steamship Company's vessels.

In addition to the above, numerous Native-owned craft, launches, tongkangs and outboard motors carry on a coastal trade between Brunei and ports in adjacent territories around Brunei Bay.

The State operates a thrice weekly motor launch service from Brunei Town to Labuan. These launches carry inward and outward bound mail and passengers and connect as far as possible with scheduled air and steamer services. Each journey entails a return trip of 70 miles and includes the crossing of Brunei Bay. The service operates in all weathers, and while in previous years it was occasionally temporarily suspended owing to the severity of the monsoon weather, an unbroken schedule was maintained in 1953.

A welcome addition to the State operated fleet of mail and passenger vessels was made in May when delivery was taken of M.V. "Sultan" a twin screw sea-going craft designed for long range and all weathers. With an overall length of 80' and a maximum loaded draft of 6', M.V. "Sultan" can carry up to 40 Second and 6 First Class passengers, and is equipped with Marconic Marine Radio and Kelvin Huges echo sounding apparatus.

Owing to her light draft, this most useful vessel can enter with safety most Brunei ports, while at the same time being capable of quite long sea voyages.

The former largest ship in the State fleet, M.V. "Tinggiri", a 75' ex Admiralty MFV, showed indication of extensive dry rot early in the year and as a result was surveyed and condemned.

The State operated fleet now consists of the following launches of various sizes:—

- One 80' twin screw sea going mail and passengers vessel.
- One 65' fast twin screw Inspection launch.
- One 45' twin screw mail and passenger launch.
- One 35' single screw River launch.
- One 65' single screw barge.
- Two 35' single screw workboats.
- One twin screw vehicle ferry.

The total number of passengers carried on these launches during 1953 are as follows, figures for 1951 and 1952 are given for comparison.

		<i>Inward.</i>	<i>Outward.</i>
1951	...	2,731	3,090
1952	...	5,789	6,504
1953	...	12,018	10,601

These figures are extracted from the records of scheduled mail trips only, in addition to which a total of 77 special or unscheduled voyages to Labuan was made by various units of the State fleet.

These vessels together with a fleet of 10 fast outboard motor launches, are constantly employed on the many other duties of a State whose main inland transport and communications are by water. In addition to mail and passenger services these duties include ration runs, medical, police services, surveys, maintenance of lighthouses, buoys and beacons, patrols, fisheries, and the many operations in shallow waters and upper reaches of the rivers where larger vessels cannot navigate.

V.F. "Higgins", a twin screw vehicle ferry, was also delivered in May and is capable of carrying up to 20 tons of vehicles at

one time, i.e. six cars or Landrovers or 4 large trucks. On completion of the new landing stages, now under construction at Danau and Kuala Tutong—the ferry points on either side of the Tutong River—V.F. “Higgins” will replace the existing ferry which consists of a pontoon towed by a 35’ workboat.

It is hoped to put this vessel into operation early in 1954. This is a most important service, as part from a sea voyage from Brunei Town to Kuala Belait, the ferry forms the main link between the North and South ends of the State.

Large ocean going ships cannot enter any of the ports in the State of Brunei, but vessels of up to 4,000 GRT regularly use a good sheltered anchorage off the Island of Baru Baru (approximately 2 miles East from the entrance to Brunei River) and there, without difficulty and in perfect safety, load such cargo as timber and fire-wood from barges and lighters.

Vessels of up to 1,700 GRT, do however, got up to Brunei Town by working the tides across the bar, where at M.L.W.S. they are limited to a draft of 7’.

The Brunei inner bar which forms the chief obstacle in the approach to Brunei, extends from Kiangaran Spit (an island on the Starboard hand close to the mainland) to Pulau Chermin, a small island on the port hand, thus lying almost right across the river mouth.

The Barrier, lying about one cable further upstream forms another obstruction. This is an ancient construction of rocks, boulders, and coral cemented together throughout the years by marine growths, and dated back probably about 300 years. A recent survey of this Barrier and approaches to Sungei Brunei gave a depth of not more than 4’ on top of the Barrier at M.L.W.S.

The removal of coral and stone from this Barrier for road-making purposes, has now ceased, and the depth of 4’ is likely to remain constant. At the southern end of the Barrier, a greatest depth of 71’ is obtained in a remarkable hole which extends across the channel.

Lights:

The new coastal navigation lights at Sapo Point and Pelong

rocks completed their first year of service satisfactorily, and have proved invaluable to both local mariners and visiting navigators.

It is obvious, however, that to take full advantage of these two lights, a series of lighted beacons are required to mark the narrow channel from Sapo Point to the Barrier at Pulau Chermin, and so into the Brunei River proper. This work will be put in hand early in 1954.

Roads:

One of the major items of the Five Year Development Plan will be the construction of an effective system of roads for the State of Brunei. At present the system is inadequate for the internal development of the country, and it is hoped that by improving existing roads and building new ones, it will be possible to open up new areas of valuable land for forestry operations and agriculture, in addition to making travel much easier within the State.

The major road in the State at present is from Brunei to Kuala Belait, but this is by no means adequate. The first 30 miles is by a surfaced road which is satisfactory for a small density of traffic, but the width which is 8' in parts, prohibits any large numbers of vehicles. The Tutong river is crossed by a primitive ferry consisting of decking covering two pontoons which are towed by a motor launch. The next part of the journey is along a beach which is impassable at high tide as far as Sungei Lumut from which a road recently built by the British Malayan Petroleum Company, connects to their network of roads in the Seria and Kuala Belait area. It is possible to travel as far as Miri by sand roads and two ferry crossings at the Belait and Baram Rivers in L.C.Ms. A new ferry boat has been purchased for the Tutong crossing where balanced ramps were under construction at the end of the year. With the operation of this new ferry, and improvements to roads from Brunei to Tutong and the construction of an inland road to obviate the beach, this trip will be made considerably quicker and much less exacting on the driver, and will not be dependent on the state of the tide.

In addition to this road a new inland trunk road has been proposed. This would be so sited as to fit in with an eventual main road scheme from North Borneo to Sarawak via Lawas,

Trusan, Bangar, Limbang, Brunei Town, Seria, Kuala Belait, Miri and Sibuti. This inland road has the advantages over the coastal route in that it will open up large areas of valuable forest land at present not workable because of its inaccessibility.

In addition to the trunk road and the remaking of most existing roads in the State, it is proposed to build a large mileage of secondary and logging roads to assist in the internal development of the State and to connect existing kampongs to the roads system.

There are approximately 160 miles of roads in the State of which approximately 60 miles were built and are maintained by the British Malayan Petroleum Company. There are approximately 38 miles of bridle path in the State but most of the communications with inland area are by river.

There was a total of 1948 vehicles licensed in the State at the end of 1953 of which 458 were in the Brunei, Muara and Tutong districts and 1490 in the Belait district. Of those in the Belait District a monthly average of 578 vehicles were owned by the B.M.P. Co. Transportation of men and equipment during a typical month in 1953 for the B.M.P. Co., involved their transport pool running 89,313 miles and the carriage of 238,168 passengers and 59,326 tons of goods.

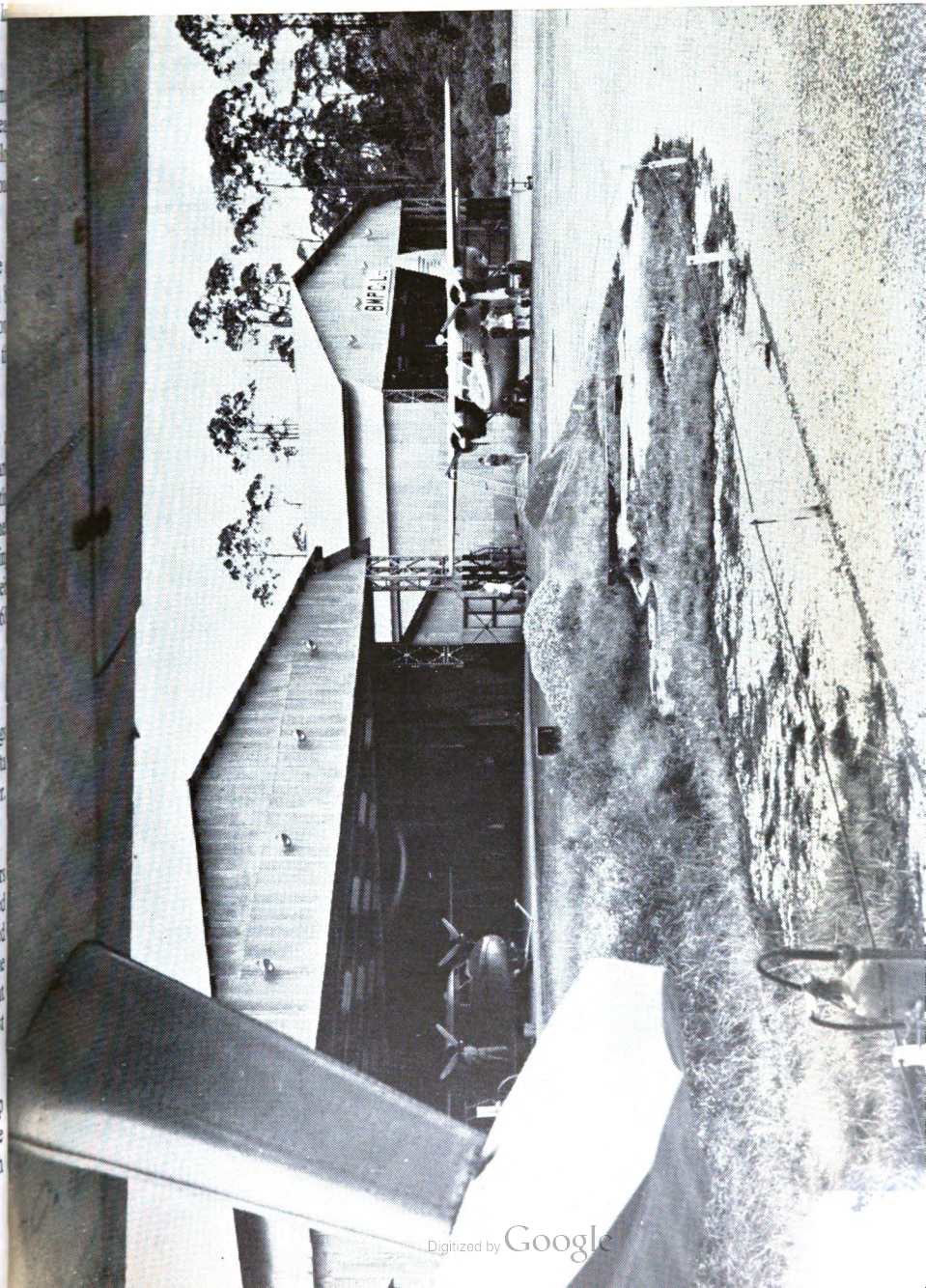
Airfields:

At present the only airfield operating in the State belongs to the B.M.P. Co. at Anduki. This is capable of landing Dakota aircraft two of which on private charter landed there in October. The strip is well grassed on a sand formation.

The only other facilities for landing aircraft are the rivers in the State, of which the Belait and Brunei rivers were used in 1953. At Kuala Belait R.A.F. Sunderland flying boats landed in January and October. The approaches to the landing in the Belait River are quite flat and the river is sufficiently straight for a distance of $1\frac{3}{4}$ miles though adequate precautions must be taken against shipping activities and floating debris.

Work has now commenced on the building of an airstrip 3 miles out of Brunei Town, the first object of which is to provide an air connection to Labuan from which connections to North

B.M.P. Co.'s Hangar at Anduki.



Borneo, Sarawak, Singapore, Hongkong, Manila and Australia are available. In the first phase the Brunei-Labuan leg will be served by an extension of the North Borneo "Rapide" feeder service, but it is hoped to enlarge this strip to take Dakota aircraft later. It is expected that the strip for the Feeder Service will be ready for operation by about mid 1954. The second stage, enlarging the strip to Dakota standard will involve the removal of Brakas village. This village which belongs to the Brunei United Government Rubber Estate is unfortunately sited at the end of the feeder strips and will be removed to Muara Road.

During 1953 the Aviation Department of the B.M.P. Co. flew a total of 970 hours covering 156,128 miles. Approximately 7,200 passengers and 616 tons of freight and luggage were carried. Two new aircraft were added to the company fleet.

Post:

There are six Post Offices in Brunei State, situated in Brunei Town, Tutong, Bangar (Temburong District), Kuala Belait, Seria and Muara. Mails to and from these places are usually conveyed by lorry and launch.

There is a thrice weekly airmail service between Singapore and Labuan in addition to weekly surface mails. A Government launch connects with the mail planes and brings both air and surface mails for Brunei Town, Tutong, Bangar and Muara. Air mail for Kuala Belait and Seria is carried on a B.M.P. Co. plane from Labuan by special arrangement with the company.

The total number of postal articles dealt with during the year was 1,031,907 compared with 772,482 in 1952.

Telecommunications:

Magneto telephone system is still being maintained in Brunei Town. Inter connection with the B.M.P. Co., Ltd. automatic telephone system can be made via a small automagnetic switch-board installed at Kuala Belait.

A direct radio telegraph service is maintained between Brunei and Singapore, and also with Kuala Belait, Seria and Temburong within the State, Jesselton and Labuan in North Borneo, and with Kuching, Miri and Limbang in Sarawak.

Chapter XII.

PRESS, BROADCASTING, FILMS AND GOVERNMENT INFORMATION SERVICES.

Press:

A private printing press was opened in Kuala Belait in October under the name of "The Brunei Press" and the first newspaper ever printed in the State appeared on 7th November. This paper has since appeared weekly every Saturday. The press is capable of undertaking all types of printing and equipment, which is mostly electrically operated, includes an Intertype automatic type-setting machine, a large self feeding cylinder press and several small automatic presses and ruling machines. At present printing blocks for pictures have to be made in Singapore but it is hoped these will later be produced locally. The press has undertaken to employ as many Brunei subjects as it employs persons from outside the State.

The British Malayan Petroleum Company publishes two staff newspapers, which are issued each Saturday morning. Both are titled "SALAM", and one edition is in English and the other in Romanised Malay. The English edition gives news of company undertakings and includes official and social notices. The Malay edition follows a similar policy, but in addition gives a limited amount of news of general world events, and endeavours to provide articles with an educational value. Both English and Malay SALAM are used to some extent as teaching media in the appropriate State schools.

Broadcasting:

There is no Broadcasting Service from Brunei at the present time and wirelesses do not require to be licensed. Increased wages and the recent rubber boom has enabled a large proportion of the population to purchase wirelesses and programmes from Singapore, Indonesia, etc., can often be heard even in the remotest villages.

Films:

Cinema Theatres number two in Brunei Town; one in Kuala Belait; two in Seria and one in Tutong.

Cinema proprietors obtain films as and when they are able. There is no "circuit" system. Consequently there is considerable competition to obtain the best films. There is a shortage of films in the Malayan medium although the Malay serial films are extremely popular when available. The American cow-boy pictures also draw large audiences. Legislation in regard to public entertainment is undergoing revision to make for the greater safety of the public.

For Government film services see the next section.

Information Services:

I. *Staff*—The staff of this Department consists of an Assistant Information Officer responsible to the Assistant Resident, Brunei, the post of Information Officer having not yet been filled; two Grade B clerks; two Grade A clerks; six Cinema Projectionists; two Peons; two Caretakers and a Driver. Pengiran Yusof bin Pengiran Haji Abdul Rahim has held the post of Assistant Information Officer throughout the year.

II. *Film Shows*—Films in English, Malay and Chinese have been shown throughout the State and occasionally in the Sarawak districts of Limbang and Lawas. These shows have been received with considerable enthusiasm everywhere.

The Department has been handicapped by a dearth of films in the Malayan language, though every effort has been made to obtain as much film as possible from the Malayan Film Unit, Kuala Lumpur. Other Departments have been encouraged to take advantage of the Cinema Shows (which now reach the remotest villages, and draw considerable crowds) to put over such other advice as is reasonably necessary.

Newsreels have been obtained direct from the Central Office of Information, London, by weekly airmail, and were immediately

distributed to every private cinema in the State, as well as shown by the Information Office itself.

Where the medium of the film is in the English language Projectionists are trained to assist by a Malayan commentary.

Among the noteworthy films which have been shown during the year are—"Darus-Salam", "A Queen is Crowned", "Elizabeth is Queen" and "Brunei Coronation in Colour". In addition during Health and Baby Week, the Department showed "Medical and Health" which was filmed in Brunei and was shown throughout the State in an effort to improve conditions of hygiene and health.

Photography:

The Department has covered all major occasions in Brunei with two cameras and has submitted photographs to local papers and for exhibition in the Information Office Reading Room.

Reading Room:

The Information Office Reading Room has been well attended throughout the year. For details of attendance see Appendix "R". In addition the Reading Room is frequently visited by parties of school children from the remotest areas of the State. A wide selection of magazines, periodicals and other pamphlets in various languages is available in addition to the various newspapers and Press releases. This material, most of which is obtained from the Regional Information Office and the United States Information Office, Singapore, is also distributed to the larger Kampongs in all districts. The Reading Room is still supplied with comfortable cane furniture and an atmosphere of quiet and comfort is maintained.

Loudspeaker Van:

A Public Address Van was purchased during the year and has accomplished invaluable work. During a minor epidemic of gastro enteritis intensive propaganda was put across to the public by this means. Later a drive for road safety lasting one month was supported by the Loudspeaker Van with considerable effect. Notices and public announcements have been broadcast through this medium which has also proved invaluable on such occasions as school sports, football matches, etc.

PART III.

Chapter I.

GEOGRAPHY.

BRUNEI is a State on the north-west coast of Borneo, lying between latitude $4^{\circ} 2''$ and $5^{\circ} 3''$ north and longitude $114^{\circ} 4''$ and $115^{\circ} 22''$ east. It forms two enclaves into the territory of Sarawak, by which it is bounded on all sides, or perhaps it would be more correct to say, historically speaking, than an intrusion of Sarawak formed by the basin of the Limbang river splits the State into separate parts. It comprises of an area of some 2,226 square miles, and has a coast line of about one hundred miles extending from Brunei Bay in the East to the boundary with Sarawak in the West.

The capital of the same name, or to give it its honorific Arabic title, Daru'l Salam (Abode of Peace) is situated on the Brunei River, about nine miles from its mouth and is distant by sea 759 nautical miles from Singapore. At the time of the last census in 1947 it had a population of 10,620. Prior to 1910 the town consisted entirely of Malay houses built on nibong piles on mud flats on the river, but it has now spread over a portion of the mainland, partly reclaimed, on which the Government offices and other public buildings and streets of shophouses have been built.

Set in a wide sweep of the river, this river town is in its way unique. At high tide under favourable conditions of light it takes on a quite remarkable beauty; viewed at close quarters it is even more remarkably ramshackle. The houses are grouped together in small villages, many being connected by precarious bridges, and there the inhabitants carry on their multifarious activities in much the same way as if they were on land. The only other town of any size is Kuala Belait at the south-western end of the State's sea-board with a population of about 5,000.

In the Seria area, which is the centre of a rapidly expanding oil producing district and the local headquarters of the British Malayan Petroleum Company, the population is approximately 12,000. At Kuala Belait with municipal services, piped water supply, electric light, domestic gas, cold storage, cinemas and other amenities, it is difficult to realise that within living memory it has been the scene of human sacrifices and that only two hours up river there are pagan tribes treasuring the grisly relics of head-hunting expeditions of not so long ago.

Climate:

The climate is of the tropical type and is characterised by uniform temperature, high humidity and copious rainfall. The heat is usually tempered by a slight breeze and the temperature rarely exceeds 90° F; the usual daily range is between 76° and 86° F.

The annual rainfall varies from 100 inches at the coast to over 200 inches in certain parts of the interior. There are no well defined seasons, but the rainfall tends to be heaviest from October to the middle of January during the period of the North-east monsoon.

Local standard time is eight hours ahead of Greenwich time (meridian 120° E). As the mean longitude of the State is roughly 115° E there is a sort of natural daylight saving of about twenty minutes.

Chapter II.

HISTORY.

THE native name for the island of Borneo has always been Pulau Kalimantan, but a Mercator's chart of 1595 gives to the town of Brunei as well as the whole island, the name of "Borneo." Early writers spell the name of the island variously, Brunei, Brunnai, Brune, Borneo, Borney, Bornei, Borne and Burni; from these variations upon the theme of one word, two words eventually crystallised—"Brunei" and "Borneo". As recently as 100 years ago, Brunei territory was always referred to as "Borneo Proper". The fact is that at the time of the earliest cartographers and writers, the kingdom of Brunei was at its zenith; the terms "Brunei" and "Borneo" were synonymous and the whole island was subject to the dominion of Brunei.

Brunei has no discovered pre-history and no established early history, and the meagre written records do not go further back than the first Mohammedan Sultan, contemporaneous with the introduction of the Arabic script in or about the fifteenth century. For records of the pre-Muslim era we have to turn to Hindu and Chinese chroniclers. Chinese annals of the sixth and seventh centuries contain reference to a kingdom known as Poli or Puni which sent tribute to the Emperors of China in A.D. 518, 523 and 616. Similar references to a state of that name 45 days' sail from Java occur in the annals of the Sung dynasty which ruled over South China from about 960 to 1280 A.D., and there are strong grounds for identifying it with Brunei, though the authorities are not unanimous on this point. With the decline of the Sung dynasty Brunei transferred its allegiance to Hindu Majapahit in Java, then back again to China, and finally at the end of the fourteenth century, paid tribute to Mohammedan Malacca. With the coming of the Ming Emperors the ties with vassal states were strengthened and tributes were sent to China several times between 1405 and 1425. Thereafter there is no record.

Brunei must soon have thrown off all allegiance for by the early years of the sixteenth century it had risen to great power, and one of its rulers, Sultan Bulkiah, or Nakhoda Ragam (the Singing Captain) a renowned sea rover, voyaged to Java and Malacca and made conquests in Borneo, the Philippines and Sulu and even seized Manila. The names of many islands scattered throughout the archipelago are alleged to commemorate the circumstances of his voyages. One legend is that he set out on a cruise with a gantang of pepper seeds and was not content to return until he had given to each seed the name of one of the myriad islands encountered. His wife was a Javaness princess whose followers intermarried with the people of Brunei, and such, according to one tradition, is the origin of the Kedayans whom custom associates with the main bodyguard of the Sultan and who introduced in Brunei a system of rice cultivation greatly superior to local standards. It is related that in his declining years he carried with him on his exploits a band of artisans whose duty it was to prepare royal tombs in remote parts of the archipelago, it being his wish should he die at sea to be buried at the nearest site, the finest of these is said to contain his remains at Kota Batu, about 1½ miles downstream from Brunei Town. This tomb of exquisite workmanship in hard basaltic stone was damaged by Spanish round shot in the seventeenth century and is now in a sorry state of dilapidation and the engravings upon it remain a secret to posterity.

This was the golden age of Brunei. Her sovereignty extended over the whole island of Borneo, the sultanates of Sambas, Pontianak, Banjarmasin, Pasir Kotei and Bolongan being her vassals, as well as over the Sulu archipelago and over the islands of Balabac, Banggi, Balambangan and Palawan.

It was probably during the lifetime of Sultan Bulkiah that Pigafetta, the Italian historian of Magellan's voyage around the world, visited Brunei and wrote the first eye-witness account in which he bore evidence as to the splendour of the Court and the size of the town of Brunei, the population of which he estimated at 25,000 families.

Kublai Khan, the Mongol Conqueror, is known to have sent an expedition from China to the eastern archipelago in 1292 and it is more than probable that this was the origin of the Chinese

colony in northern Borneo which is commemorated in the nomenclature of Kinabatangan river and the mountain Kinabalu and which according to tradition provided Brunei with an early ruler.

In 1291, according to Macro Polo there was a considerable junk carried trade between Brunei and China.

In Brunei, the traditional ceremony, the royal procedure and the nomenclature of officers of State, all commemorate Hindu and Chinese influences. The Hindu influence emanated from the Empire of Majapahit in Java and according to Javanese records a force expelled Sulu marauders from Brunei in 1368 and Brunei is mentioned as one of the countries conquered during the reign of the Angka Wijaya who was the last king to reign over Majapahit before it was vanquished by Mohammedan Malacca.

The Portuguese visited Brunei in 1526 and confirmed the glowing account of Pigafetta. Further visits were paid by the Portuguese until 1530, and a trading factory and a Catholic mission were established at the beginning of the next century. Spain, too, having possession of the Philippines, evinced an active interest in Brunei affairs and twice attacked the capital. Later the English and Dutch in turn made sporadic appearance.

Towards the end of the sixteenth century the power of Brunei began to decline and the outlying territories gradually fell away. The Dutch, having established trading stations on the South-west, South and East of Borneo rapidly extended their sphere of influence over the semi-independent but nominally vassal sultanates. This disintegration continued until by the beginning of the nineteenth century the Kingdom of Brunei had so dwindled in extent as to include only what is now Sarawak and part of North Borneo.

At this period the capital itself seems to have degenerated to the condition of a slave market for the sale of captives of Illanun and Sulu pirates. Anarchy was rife in the outlying districts and in 1841, in return for his services in assisting the Bendahara Raja Muda Hashim, Viceroy of Sarawak, to quell an insurrection at Kuching, Sarawak proper was ceded to Mr. James (later Sir James) Brooke, who was proclaimed Rajah of Sarawak. In 1846 the island of Labuan was ceded to Great Britain as a

base for anti-piracy measures and for the watering and careening of ships, and in 1877 the whole of the northern portion of Borneo was ceded to form the nucleus of what was to become British North Borneo. At various later dates further cessions were made to the Rajah of Sarawak and to the British North Borneo Company till the territories of the State were eventually reduced to their present circumscribed limits.

In 1847 the Sultan entered into a treaty with Great Britain for the furtherance of commercial relations and the mutual suppression of piracy with an additional clause providing for extra-territorial jurisdiction over British subjects in Brunei, which provision was modified by the Agreement in 1856. By a further treaty made in 1888 Brunei was placed under the protection of Great Britain, and the Sultan agreed that the foreign relation of the State should be conducted by Her Britannic Majesty's Government. Provision was also made for the setting up of consular courts with jurisdiction over British subjects and foreign subjects enjoying British protection. In 1906 a supplementary agreement was entered into whereby the Sultan undertook to accept a British Officer to be styled Resident, who should be the agent and representative of the British Government under the High Commissioner for the Malay States.*

The years between 1906 and 1941 were years of steady progress. Very shortly after the treaty a form of Government was set up under the Sultan in Council and the British Resident, and law and order was established. Roads were built, people were encouraged to become agriculturists and fishermen according to their way of life. Conditions of housing were improved and trade flourished. The discovery of a workable oilfield at Seria only 10 miles from Kuala Belait in 1929 gave added importance to the State and its revenue increased and Brunei became prosperous.

Period of Japanese Occupation:

In the early morning of 16th December, 1941, the first wave of Japanese Forces landed at Kuala Belait and occupied the oil-fields at Seria. Six days later on 22nd December, Brunei Town

* The treaties and agreements relating to events described in this and the preceding paragraph were published as appendices to the Annual Report for 1946.

was occupied and all the British Government Officials were interned. Almost immediately the Japanese introduced their East Asia Co-Prosperity policy, but it had a bad effect on the people's morale when public thrashing had to be attended and later the Japanese dropped that policy to a certain extent. People living near Kuala Belait were driven to work in the oilfields and the country folk were forcibly made to grow food.

Trade, of course, came to a standstill and only certain shopkeepers were allowed to remain as distributors. Luckily for the native population the Government in the years immediately preceding the outbreak of war had compelled traders to import large stocks of rice, the staple food, in case the European war disrupted shipping in the Far East. As a result of that policy the population had ample food for the first year and only slightly less in the second year, but by the end of 1943 the stocks had been used up and only a trickle of food was able to enter the country owing to Japanese shipping losses. Even the Japanese themselves lacked food, but not for long. As soon as the local harvest was in the majority of it was confiscated to feed the Japanese Forces and a serious state of starvation prevailed. Medicines were almost non-existent, malaria spread and the resistance of the population to disease was broken down.

The Japanese policy seems to have been one of neglect. No anti-malarial work was done and no maintenance of houses, roads, ditches or water transport was even contemplated.

In 1944 the Allied Air Force began to take an active interest in Brunei. There were almost daily raids somewhere in the State and later the main town areas were destroyed by bombing. All the shophouses were destroyed in Kuala Belait and Brunei Town and in the latter town the newly completed hospital with X-ray equipment was literally blown off the face of the earth. Luckily the famous River Kampong was spared but many houses have scars of machine gun bullets to bear witness to those frightful days. Most of the native population went into the interior to look for a piece of land to cultivate and live on until the coming of the Allied Forces.

Allied Re-Occupation:

On 10th June 1945, the Allied Forces landed at Muara and proceeded towards Brunei which they entered easily, having only

encountered small activity. The Japanese in the meantime were busily destroying their installations in setting fire to the oilfields at Seria. Realising that the end had come the Japanese took out all the civilians imprisoned for suspected anti-Japanese activities and executed them in their usual cowardly fashion. Their forces then moved up country and into the interior where many of them met untimely ends at the hands of the Dayaks.

Almost immediately a system of Government was set up under British control and so began the era of reconstruction under the British Military Administration. The population was found to be in a shocking state of health and it is no exaggeration to state that if the landing had not taken place when it did thousands of people would soon have perished through starvation and disease.

Free food and clothing were distributed as quickly as possible to the whole population and the sick were taken to hospital. Those Government servants who were still capable of work reported for duty and the gaps were filled by many wellknown members of the various communities.

Distribution of supplies was difficult because Japanese had allowed the roads to revert to jungle and grass was growing on many of the roads in the town area. Water transport was scrapped together from old hulls and Japanese engines were put into them. Rubble had to be cleared away in the town, bombraters filled in and roads rehabilitated.

Temporary shophouses were built along the river bank and partly over the water from the beginning of Jalan Stoney up towards the Customs Wharf until such time as the shop area could be cleared and drained.

Gradually the health of the population improved and order was restored to something like normal. Trade began again though very slowly and prices, other than those goods distributed from the Supply Depot, were prohibitive at first.

On 6th July 1946, the Government of the country was formally handed over to the Civil Authorities.

Chapter III.

ADMINISTRATION

BRUNEI is a sultanate. The present Ruler, the twenty-eighth of his line, His Highness Sir Omar Ali Saifuddin, K.C.M.G. was born on 23rd September, 1916 and succeeded to the throne, on the death of his elder brother, on the 6th June, 1950.

The supreme authority in the State is vested in the Sultan in Council. The State Council consists of eleven members, including the British Resident with the Sultan as President. The assent of the Council is required for the enactment of legislation and important questions of policy are referred to it.

The general functions of administration are carried out by a British Resident under the supervision of the Governor of Sarawak as High Commissioner. By a Treaty of 1906 the Resident's advice must be asked and acted upon in all questions other than those affecting the Mohammedan religion. The seat of Government is in Brunei Town and there are Assistant Residents at Kuala Belait and at Headquarters.

The State is divided into four administrative districts, namely, Brunei and Muara, Temburong, Tutong and Belait, in each of which there are Malay District Officers who are responsible to the Resident.

European Officers are generally in charge of the Public Works, Medical, Agricultural, Forests, Police, Customs and Education Departments, but at present the Agricultural Department is without a European head. The Controller of Customs and Marine is also State Treasurer, and the State Engineer supervises the Electrical Department.

At Brunei, Tutong and Kuala Belait there are Sanitary Boards whose members, of all nationalities, are appointed by Government. They are responsible for sanitation, conservancy,

street lighting, rating and other municipal matters within their respective areas.

Government continues to control the distribution of commodities such as rice and sugar. For this purpose there are Supply Depots in Brunei Town and Kuala Belait, and prices are strictly controlled.

Chapter IV:

WEIGHTS AND MEASURES.

BOTH English and local weights and measures are used. The legal standard weights and measures from which all others are ascertained are the Imperial yard, the Imperial pound and the Imperial gallon.

The following are the principal local weights and measures and their English equivalents:—

The chupak equal to 1 quart.

The gantang equal to 1 gallon.

The tahlil equal to $1\frac{1}{2}$ ozs.

The kati (16 tahils) equal to $1\frac{1}{2}$ lbs.

The pikul (100 katis) equal to $133\frac{1}{2}$ lbs.

The koyan (40 pikuls) equal to $5,333\frac{1}{2}$ lbs.

APPENDIX

Table showing quantity and value of imports for years 1952 and 1953.

Group No.	Heading	Unit	1952		1953	
			Quantity	Value \$	Quantity	Value \$
001	Live animals, chiefly for food	heads	5,994	273,191	5,744	423,706
011	Meat; fresh, chilled or frozen	lbs.	263,610	279,515	213,979	263,639
012	Meat; dried, salted or smoked not canned	"	99,626	141,145	270,431	560,983
013	Meat canned & meat preparations, canned and not canned	"	839,921	1,106,107	210,950	449,961
021	Milk and cream; fresh	"	—	—	—	—
022	Meat and cream; evaporated, condensed or dried	"	809,778	645,870	985,972	688,972
023	Butter	"	97,465	158,375	101,833	192,762
024	Cheese	lbs.	19,238	27,922	32,366	53,681
025	Eggs	pcs.	940,397	210,332	1,208,042	265,627
026	Natural honey	lbs.	1,166	1,563	852	638
029	Miscellaneous dairy products	"	—	100,695	—	324,457
031	Fish; fresh or simply preserved	pk.	3,218	234,239	2,320	185,400
032	Fish canned and fish preparations	lbs.	251,192	267,212	287,153	331,012
041	Wheat unmilled	pk.	—	—	—	—
042	Rice	"	89,916	2,882,917	72,477	2,472,361
043	Barley unmilled	"	—	—	—	—
044	Maize unmilled	"	9,896	236,918	10,866	265,309
045	Cereals unmilled, other than wheat, rice, barley and maize	"	—	—	—	—
046	Wheat Flour	pk.	1,368,672	312,037	1,586,564	331,477
047	Cereals milled, except wheat flour	lbs.	99,161	35,954	267,063	64,399
048	Cereals preparations	pk.	6,595	561,910	8,473	738,181
051	Fruits and nuts, fresh (not including oilnuts)	"	8,136	265,950	24,418	337,542
052	Dried fruits	"	128	15,319	197	35,509
053	Fruits preserved and fruit preparations	lbs.	249,477	223,711	287,794	262,419
054	Fresh and dry vegetables, roots and tubers, not included artificially dehydrated	pk.	—	—	—	—
055	Vegetables, preserved & vegetable preparations	lbs.	259,788	653,365	314,479	482,246
061	Sugar	"	3,953,614	1,317,740	3,141,167	366,041
062	Sugar preparations	"	—	—	—	907,610
071	Coffee	"	152,993	266,672	—	294,272
072	Cocoa	"	—	238,508	169,730	235,041

APPENDIX

Group No.	Heading	Unit	1952		1953	
			Quantity	Value \$	Quantity	Value \$
073	Chocolate and preparations	lbs.	—	165,536	—	249,480
074	Tea and mate	"	46,590	130,892	70,141	178,631
075	Spices	"	—	117,600	—	128,186
081	Feeding stuff for animals not including unmilled cereals	pkl.	—	270,596	—	307,137
091	Miscellaneous food preparations	lbs.	281,484	352,073	368,752	645,507
099	Miscellaneous food preparations n.e.s.	"	—	668,966	—	557,819
111	Water and other non-alcoholic beverages	gls.	21,043	71,175	66,098	182,399
112	Alcoholic beverages	"	137,419	826,783	210,466	1,202,833
121	Tobacco unmanufactured	lbs.	—	—	—	—
122	Tobacco manufactured	"	238,328	1,413,129	317,486	1,732,070
211	Hides and skins (except for skins) undressed	pkl.	—	—	—	9,474
212	Fur skins undressed	"	—	—	—	—
221	Oilseeds, oilnuts and oil kernels	pkl.	95	17,733	—	—
231	Crude rubber, including synthetic and reclaimed	lbs.	—	—	—	—
241	Fuelwood and charcoal	ton	—	—	—	—
242	Wood in the round	"	—	—	—	—
243	Wood shaped or simply worked	"	—	—	8,329	1,190,633
244	Cork, raw	pkl.	6,583	879,151	—	—
251	Pulp and waste paper	"	1,319	9,238	1,166	20,228
261	Silk	"	—	26,750	—	—
262	Wool and other animals hair	"	—	—	—	—
263	Cotton	lbs.	—	46,256	—	69,788
264	Jute	"	—	20,898	—	35,612
265	Vegetable fibres except cotton and jute	"	—	247,628	—	162,710
266	Synthetic fibres	"	—	—	—	—
267	Waste materials from textile fabrics	"	—	—	—	—
271	Fertilizers, crude	lbs.	—	—	—	—
272	Crude minerals, excluding coal, petroleum fertilizer materials & precious stones	"	—	25,512	—	185,191
281	Iron ore	ton	—	—	—	—
282	Iron and steel scrap	"	—	—	—	—
283	Ores of non-ferrous base metals & concentrates	"	—	—	—	—
284	Non-ferrous metal scrap	"	—	—	—	—
285	Silver and platinum	"	—	—	—	—
291	Crude animal materials, inedible, n.e.s.	"	—	—	—	465

Group No.	Heading	Unit	1952		1953	
			Quantity	Value \$	Quantity	Value \$
292	Crude vegetable materials, inedible, n.e.s.	lbs.	—	435	—	183
311	Coal, coke and briquettes	gls.	—	—	—	—
312	Petroleum, crude and partly refined	"	—	—	—	—
313	Petroleum products	cu. ft.	3,337,212	3,889,071	3,618,313	4,491,613
314	Gas, natural and manufactured	—	—	48,543	—	25,113
315	Electric energy	—	—	—	—	—
411	Animal oils and fats	pkł.	—	8,285	—	—
412	Vegetable oils	"	—	510,494	—	724,357
413	Oils and fats processed, and waxes of animal or vegetable origin	—	—	—	—	—
511	Inorganic chemicals	lbs.	—	438,753	—	1,644,150
512	Organic chemicals	gls.	—	—	—	—
521	Mineral tar and crude chemicals from coal petroleum and natural gas	—	—	227,887	—	645,132
531	Coal-tar dyes	—	—	14,760	—	548
532	Dyeing and tanning extracts & synthetic tanning materials	—	—	—	—	—
533	Pigments, paints, varnishes & related materials	—	—	478,367	—	1,103,534
541	Medicated and pharmaceutical products	—	—	519,595	—	651,202
551	Essential oils, perfume and flavour materials	—	—	—	—	—
552	Perfumery, cosmetics, soaps and cleansing and polishing preparations	—	—	—	—	—
561	Fertilizers	Rds./pcs.	—	296,979	—	289,753
591	Explosives	—	—	3,191	—	5,804
599	Miscellaneous chemicals materials products	—	—	209,870	—	197,693
611	Leather	pkł.	—	8,524	—	30,936
612	Manufactures of leather, n.e.s.	—	—	36,315	—	75,402
613	Furs, dressed or dressed and dyed	—	—	—	—	—
621	Rubber fabricated materials	—	—	157,542	—	82,137
629	Rubber manufactured articles, n.e.s.	pcs.	—	924,092	—	865,551
631	Veneers, plywood, boards etc.	—	—	3,500	—	615
632	Wood manufactures n.e.s.	—	—	—	—	—
633	Cork manufactured	pkł.	—	—	—	—
641	Paper and paperboard	—	—	411,040	—	809,913
642	Articles made of pulp, or paper and of paper-	—	—	—	—	—

Group No.	Heading	Unit	1952		1953	
			Quantity	Value \$	Quantity	Value \$
651	Textile yarn and thread	lbs.	6,902	30,886	—	21,073
652	Cotton fabrics of standard type	yds.	989,266	703,004	1,212,818	1,048,383
653	Textile fabrics of standard type, other than cotton fabrics	"	93,709	104,606	155,271	180,517
654	Tulle, lace, embroidery, ribbons trimmings and other small wares	"	—	—	—	—
655	Special textile fabrics and related products	"	—	70,953	—	248,676
656	Made-up articles wholly or chiefly of textile materials n.e.s.	pcs.	1,873	184,516	—	361,742
657	Floor coverings and tapestries	pcs.	—	5,174	8,242	20,443
661	Lime, cement and fabricated building materials except glass and clay materials	ton	—	3,457,218	—	3,277,847
662	Clay construction materials and refractory construction materials	ton	—	369,442	—	680,391
663	Mineral manufactures, n.e.s. not including clay and glass	"	—	—	—	—
664	Glass	"	—	75,992	—	8,753
665	Glassware	"	—	21,227	—	243,565
666	Pottery	"	—	247,292	—	284,733
671	Silver and platinum group metals	ths.	—	210,623	—	194,083
672	Precious and semi-precious stones and pearls, unworked and worked	ths.	—	15,098	—	10,053
673	Jewellery and goldsmiths' and silversmiths' wares		—	—	—	—
681	Iron and steel	"	—	201,227	—	183,600
682	Copper	"	—	5,728,640	—	15,492,447
683	Nickel	"	—	30,094	—	41,106
684	Aluminium	"	—	—	—	22,064
685	Lead	"	—	2,539	—	2,842
686	Zinc	"	—	86,464	—	160,471
687	Tin	"	—	—	—	—
689	Miscellaneous non-ferrous base metals employed in metallurgy	pcs.	116	14,581	52	5,759
691	Ordinance	pcs.	—	—	—	—

Group No.	Heading	Unit	1952		1953	
			Quantity	Value \$	Quantity	Value \$
699	Manufactures of metals, n.e.s.	ton	—	1,943,778	—	3,985,551
711	Power generating (except electric) machinery	pcs.	—	1,764,533	—	7,384,520
712	Agricultural machinery and implements	"	—	10,217	—	61,928
713	Tractors other than steam	"	5	20,977	20	700,222
714	Office Machinery	"	—	59,710	—	242,946
715	Metalworking machinery	"	—	27,784	—	2,100
716	Mining construction and other industrial machinery	"	—	—	—	—
721	Electric machinery apparatus and appliances	"	—	11,259,365	—	14,809,269
731	Railway vehicles	"	—	1,100,936	—	4,292,215
732	Road motor vehicles	"	—	21,089	—	59,092
733	Road vehicles other than motor vehicles	"	—	3,674,443	—	7,471,213
734	Aircraft	"	—	372,090	—	443,920
735	Ships and boats	"	—	31,925	—	205,497
811	Prefabricated buildings & their assembled parts	"	—	704,664	—	1,177,573
812	Sanitary, plumbing, heating and lighting fixtures and fittings	"	—	699,452	—	1,971,094
821	Furniture and fixtures	"	—	43,045	—	152,786
831	Travel goods and handbags, etc.	"	—	448,698	—	1,017,447
841	Clothing except fur clothing	"	—	514	—	259,849
842	Fur clothing	"	—	371,292	—	481,722
851	Footwear	"	83,940	—	97,670	—
861	Scientific, medical, optical, etc., instruments	prs.	—	253,141	—	345,543
862	Photographic and Cinematographic supplies	rls.	—	55,272	—	112,630
863	Exposed cinematographic films	"	7,985	7,787,690	14,112	13,742,768
864	Watches and clocks	"	—	129,625	—	121,975
891	Musical instruments, phonograph and phonograph records	"	—	—	—	—
892	Printed matter	"	—	82,224	—	88,188
899	Manufactured articles, n.e.s.	"	—	133,511	—	74,809
911	Postal packages	"	—	1,936,357	—	2,484,679

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1952		1952	
			Quantity	Value \$	Quantity	Value \$
921	Live animals other than for food	...	2	700	4	955
931	Returned goods and special transactions	...	—	7,485,475	—	9,585,000
	Notes	...	—	—	—	15,000
	Coins	...	—	—	—	286,780
	Gold	...	1,530	244,846	1,878	—
				76,719,967		123,322,162
	Re-exports	...		3,960,150		5,001,930

APPENDIX “B”

Table showing the quantity and value of principal exports for years 1952 and 1953.

Heading	Unit	1952		1953	
		Quantity	Value \$	Quantity	Value \$
Crude oil ...	Long ton	4,990,194	270,684,253	4,799,473	263,961,743
Firewood, mangrove	ton	17,895	460,950	15,761	270,756
Jelutong rubber ...	ton	140	260,516	154	271,445
Natural gas ...	1,000 cu. ft.	1,669,740	442,435	2,059,127	514,781
Plantation rubber ...	pound	3,928,698	3,785,050	2,616,605	1,699,347
			275,633,204		266,718,072

APPENDIX "C"

STATISTICS OF LAND APPLICATIONS

1. Total No. of new applications
of under 10 acres:—

(a) Native	...	...	778
(b) Non-native	...	...	229
<hr/>			
(c) Total	...	...	1,007

2. Total No. of new applications
of over 10 acres:—

(a) Native	...	...	37
(b) Non-native	...	...	28
(c) Total	...	...	65

Grand Total ... 1,072

3. Total for:—

(a) Sago	...	...	...	60
(b) Padi	...	...	...	215
(c) Rubber	...	...	...	94
(d) Fruit & vegetable	...	...	...	658
(e) Animal breeding	...	...	...	15
(f) Miscellaneous	...	...	...	30

Total 1,072

APPENDIX "D"

THE TABLE BELOW SHOWS MONTHLY RAINFALL FOR BRUNEI STATE
FOR THE YEAR 1953 INCLUDING TOTAL ANNUAL RAINFALL FOR 1952

Month	Brunei Town Inches	Tutong Inches	K. Belait Inches	Tembu- rong Inches	Kilanas Inches	Birau Inches	TOTAL	AVER- AGE	1952	
									District	ANNUAL RAINFALL Inches
January	7.17	3.88	21.41	—	6.99	7.25	46.70	9.34	Brunei	104.40
February	7.00	8.13	4.89	—	4.40	4.35	28.71	5.74	Tutong	117.94
March	2.78	3.80	6.73	21.57	2.69	1.66	39.23	6.54	K. Belait	108.37
April	5.23	3.76	4.89	8.01	7.92	5.11	34.92	5.82	Temburong	—
May	8.00	3.83	7.77	8.98	9.60	8.26	46.44	7.74	Kilanas	113.11
June	3.99	11.29	7.77	11.40	5.30	6.96	46.71	7.78	Birau	114.21
July	10.49	10.45	10.93	14.16	13.21	8.33	67.37	11.23		
August	2.26	3.56	2.58	5.25	2.90	3.43	19.98	3.33		
September	8.84	6.42	12.15	10.94	13.12	6.84	58.31	9.72		
October	11.07	10.49	13.26	14.48	10.74	6.63	66.67	11.11		
November	11.39	10.50	12.24	15.60	14.33	8.69	72.75	12.12		
December	8.23	4.35	9.56	11.53	7.11	2.79	43.57	7.26		
TOTAL	86.45	80.46	114.18	121.92	98.31	70.30	571.62	97.73		

APPENDIX "E"

GLOSSARY OF VERNACULAR NAMES AND TERMS

Attap (leaf)	Roofing material made from palm leaves
Belukar	Secondary forest after shifting cultivation
Bukit	Hill
Damar	Resin, yielded mainly by the family Dipterocarpaceae
Getah	Rubber, latex
Gula	Sugar obtained from the Nipah palm
Jelutong	<i>Dyera</i> spp. the latex is the principal ingredient in chewing gum
Kajang	Matting made from leaves, used as walling or roofing material
Kapur	<i>Dryobalanops</i> spp. Medium hardwood
Kapur paya	<i>Dryobalanops rappa</i> Becc. medium hardwood, considered inferior to the hill kapurs
Meranti	<i>Shorea</i> spp. Light hardwood
Nibong	<i>Oncosperma filamentosa</i> Bl., a common palm producing a useful wood
Nipah	<i>Nipa fruticans</i> Wurmb.; a palm common along the tidal reaches of rivers, and in mangrove swamps
Pikul	133lbs. weight
Ramin	<i>Gonystylus bancanus</i> (Miq.) Kurz; light hardwood
Resak	<i>Contyloleobium</i> and <i>Vatica</i> spp.; heavy and medium hardwood
Rumbia	<i>Metroxylon sagus</i> Rothb., the sago palm
Selangan batu	<i>Shorea</i> spp. Heavy hardwood
Seringawan	<i>Shorea albida</i> Sym. A red meranti
Seringawan var. bunga	A light variety of above
Semayor	<i>Shorea inaequilateralis</i> Sym. Heavy hardwood
Sungei	Stream
Tikar	Woven mat of split material

APPENDIX "F"

Area in acres of constituted and proposed forest reserves on 31st December, 1953

District	Finally constituted reserves Name of reserve	Area on 1.1.53	Added during 1953	Excluded during 1953	Area on 31.12.53	Proposed reserves prelimina- rily notified	Number of Notification
1	2	3	4	5	6	7	8
Belait	Labi Hills	287,300	—	24,300	263,000	250	175/1953, 193/1953, 194/1953
"	Anduki	1,932	—	28	1,904		
"	Badas	65	—	—	65		
"	Forest Nursery	27	—	—	27		
Belait & Tutong	Andulau	31,000	—	310	30,690		
Tutong	Ladan Hills	84,000	—	—	84,000		
Brunei	Berakas	560	—	—	560		
Temburong	Batu Apoi	173,000	*15,500	—	188,500		
"	Selirong	6,175	—	—	6,175		
"	Labu	—	22,200	—	22,200		165/1953
"	Peradayan	—	2,650	—	2,650		192/1953
		584,059	40,350	24,638	599,771		

*By re-computation

APPENDIX "G"

Outturn in solid cubic feet timber and fuel under licences 1953

Forests	Heavy Round	Hardwood Sawn	Other Round	Timber Sawn	Total Round	Timber Sawn	Poles	Firewood Mangrove	Other	Charcoal	Boats C. ft.
A. Reserved Forests	4,423	9,130	170,961	81,253	175,384	90,383	5,141 *47,123	242,945	—	2,773	—
B. Other Forests	30,163	21,372	456,213	64,937	486,376	86,309	32,706	237,789	40,375	21,040	35
TOTAL	34,586	30,502	627,174	146,190	661,760	176,692	84,970	480,734	40,375	23,813	35

*B.M.P. Co. under Special Permits

APPENDIX "H"

Outturn of minor forest produce under licences 1953

Forests	Jelutong Pkl.	Other Pkl.	Gedah \$	Bam- boos \$	Damar \$	Nibong \$	Rotan \$	Kajang- Tikar \$	Nipah \$	Rum- bia \$	Gula \$	Misc. \$	Total \$
A. Reserved Forests	117	1,711	—	—	—	—	4	—	—	—	—	—	1,715
B. Other Forests	1302	15,313	—	—	72	10	1600	345	753	356	438	87	19,463
TOTAL	1419	17,024	—	—	72	10	1600	349	753	356	438	87	21,178

APPENDIX "I"

STATEMENT OF REVENUE WHOLE STATE (BY DISTRICT)

District	Timber and Poles	Firewood and Charcoal	Minor Produce	Forest Produce	Miscellaneous	Compensation and Fines	TOTAL
Brunei	939.50	18,069.64	8,660.68	11.00	—	—	27,680.82
Tutong	8,618.41	2,417.50	5,388.66	15.12	5.00	—	16,444.69
Temburong	3,585.77	188.46	142.50	45.00	10.00	—	3,966.73
Belait	60,835.01	143.98	7,601.57	34.00	—	—	68,662.56
TOTAL	74,026.69	20,819.58	21,793.41	105.12	15.00	—	116,759.80

APPENDIX "J"

EXPENDITURE WHOLE STATE 1953

Personal Emoluments	Annually Recurrent	Special Expenditure	Total
62,021.14	22,724.50	400.65	85,146.29

APPENDIX "K"

CRIME STATISTICS—1953

1 SEIZABLE OFFENCES—PENAL CODE

True Reports	...	...	...	...	...
House-Breaking	...	...	...	...	...
Simple Theft	...	...	...	...	...
Criminal Trespass	...	...	...	...	...
Theft in Building	...	...	...	...	...
Dangerous Driving	...	...	...	...	...
Other Offences	...	...	...	...	...
Convictions	...	...	...	...	...
Acquittals	...	...	...	...	...
Undetected	...	...	...	...	...

2. NON-SEIZABLE OFFENCES—PENAL CODE

True Reports	...	...	...	...	...
Assaults	...	...	...	...	...
Mischief	...	...	...	...	...
Other Offences	...	...	...	...	...
Convictions	...	...	...	...	...
Acquittals	...	...	...	...	...
Referred to Magistrate	...	...	...	...	...

3. SEIZABLE OFFENCES—OTHER LAWS

True Reports	...	...	...	...	...
Offences against Opium Enactment	...	...	...	...	...
Gambling Offences	...	...	...	...	...
Offences against Firearms Enactment	...	...	...	...	...
Convictions	...	...	...	...	...
Acquittals	...	...	...	...	...

4. NON-SEIZABLE OFFENCES—OTHER LAWS

True Reports	...	...	...	...	...
Offences against Minor Offences Enactment	...	...	...	...	...
Other Offences	...	...	...	...	...
Convictions	...	...	...	...	...
Acquittals	...	...	...	...	...
Referred to Magistrate	...	...	...	...	...

5. TRAFFIC OFFENCES

True Reports	...	...	...	...	...
Offences against Traction Engine Enactment	...	...	...	...	...
Offences against Minor Offences Enactment	...	...	...	...	...
Convictions	...	...	...	...	...
Acquittals	...	...	...	...	...

APPENDIX "L"

GENERAL SUMMARY OF EXPENDITURE — 1953.

			<i>Expenditure</i>
1. Public Works Personal Emoluments	...	\$	225,938.92
2. Public Works Other Charges, Annually Recurrent	....	...	577,147.63
3. Public Works Annually Recurrent	...		1,254,153.45
4. Public Works Non-Recurrent	...	...	8,237,546.31
5. Public Works—Miscellaneous	...	...	1,491,803.19
6. Public Works Non-Recurrent (Unprovided)	...	...	293,367.69
7. Public Works—Development Part II	...		170,240.14
TOTAL			<u>\$12,250,197.33</u>

APPENDIX "M"

PUBLIC WORKS DEPARTMENT

*Comparison of the Establishment for 1952, approved for 1953,
filled 1953 and approved 1954.*

<i>Description of Post.</i>	<i>Post Filled 1952.</i>	<i>Post Approved 1953 Es- timate.</i>	<i>Post Filled 1953.</i>	<i>Post Approved 1954 Es- timate.</i>
State Engineer	... 1	1	1	1
Assistant State Engineers	... 1	2	2	2
Assistant Engineers	... 1	2	2	2
Chief Technical Assistants	1	6	1	6
Senior Technical Assistants	3	12	4	8
Technical Assistants	... —	1	1	5
Engineer i/c Heavy Equipment	... —	1	1	1
Officer i/c Workshops	... 1	1	1	1
Clerk Superscale Grade "B"	1	2	1	2
Clerks Grade "B"	... 4	9	7	9

Overseers Special Grade ...	2	3	2	3
Overseers ...	6	13	7	13
Sub-Overseers ...	3	11	10	11
Engineering Draughtsman	1	2	1	2
Tracers ...	3	4	4	4
Storekeeper Special Grade	—	1	1	1
Storekeeper Grade II ...	1	2	2	2
Storekeeper Grade III ...	1	1	1	1
Peons ...	1	2	1	2
Carpenters Special Grade ...	1	2	1	2
Plumber Grade I ...	1	1	—	1
Mechanic Special Grade ...	1	1	—	1
Mechanic Grade I ...	1	2	1	2
Lorry & Roller Drivers				
Grade I ...	5	12	5	12
Clerk on Agreement ...	1	1	1	1
Fitters Grade I ...	2	3	2	3
Mobile Plant Operators ...	—	3	—	3
Electric Welder Grade I ...	—	1	—	1
Auto Electrician ...	—	1	1	1
Turner ...	—	1	—	1
Blacksmith Grade I ...	—	1	—	1

APPENDIX "N"

STATEMENT OF ACCOUNTS

1st January to 31st December, 1953.

ELECTRICITY SUPPLY.

<i>Revenue.</i>	<i>Expenditure.</i>
Collection ... \$172,938.40	Wages, Stores etc. ... \$129,865.
	Excess Revenue over
	Expenditure ... 43,073.
<u>\$172,938.40</u>	<u>\$172,938.</u>

WIRING.

<i>Revenue.</i>		<i>Expenditure.</i>	
Collection ...	\$1,691.60	Wages, Stores etc. ...	\$ 1,106.42
		Excess Revenue over	
		Expenditure ...	585.18
	<u>\$ 1,691.60</u>		<u>\$ 1,691.60</u>

SALE & HIRE OF ELECTRICAL APPLIANCES.

<i>Revenue.</i>		<i>Expenditure.</i>	
Collection ...	\$ 15,580.64	Wages, Stores etc. ...	\$ 5,164.77
		Excess Revenue over	
		Expenditure ...	10,415.87
	<u>\$ 15,580.64</u>		<u>\$ 15,580.64</u>

APPENDIX "O"

BUILDINGS COMPLETED, 1953.

Brunei:

- ...
- 1 Block 2 Senior Officers Quarters.
 - 1 Block Senior Officers Quarters. (Subok)
 - 1 Block Senior Officers Quarters. (Plywood)
 - 3 Blocks Senior Officers Quarters. (Prefabricated)
 - 8 Blocks Class "E" Quarters.
 - 2 Blocks 4 Class "F" Quarters.
 - Police Headquarters.
 - Nurses Hostel.
 - Second Supply Godown.
 - Kampong Ayer Infant School.
 - Garages at Hospital.
 - Alteration to Mental Wing Hospital.
 - Alteration to Rest Houses.
 - Extension to English School.
 - 2 Blocks Temporary Barracks.

Tutong:

- 1 Block Class "E" Quarters and Garage.
- 1 Block 2 Class "F" Quarters.
Extension to Malay School.

Muara:

Store for School.

Kiudang:

- 1 Block 2 Class "F" Quarters.
New Malay School.

Kuala Abang:

- 1 Block Class "F" Quarters with Office attached.

Lumapas:

- 1 Block Class "G" Quarters.
New Malay School.

S. Hanching:

- 1 Block 2 Class "F" Quarters. (Temporary)

Brakas:

New School and Quarters. (Temporary)

Kilanas:

- 1 Block single Class "F" Quarters.

Kuala Belait & Seria:

- 2 Blocks Senior Officers Quarters.
- 2 Blocks Class "C" Quarters.
- 1 Block Class "E" Quarters.
- 5 Blocks 2 Class "F" Quarters.
- 1 Block Single Class "F" Quarters.
- 4 Blocks 10 door Barracks. (One Temporary)
- 2 Blocks 6 door Barracks. (One Temporary)
- 2 Block Extension to Barracks.
- 1 Block 3 door Barracks. (Temporary)
- 1 Block 7 door Garages. (P.W.D.)
- 1 Block 6 door Garages. (Police)
- Police Canteen and Lecture Room.
- Electric Substation Seria.
- Temporary Market.
- Temporary Cement Store.
- Washing Ramp.
- Grandstand.
- Extension to Government Offices.
- Extension to Clinic.
- Alteration to Stores for State Supply Office.

APPENDIX "P"

ROADS.

Name.	Earth. miles.	Block & Gravel. miles.	Asphalt. miles.	Con- crete. miles.	Other Surfa- ces. miles.	Total. miles.
Brunei Town Road	1.45	1.73	2.55	0.72	—	6.45
Approach Roads Town	0.49	0.56	1.10	0.11	0.12	2.38
Brakas	3.12	4.60	1.34	—	0.14	9.20
Gadong	1.37	—	—	—	—	1.37
Brakas Muara	13.79	—	—	—	—	13.79
Brunei Tutong	—	1.55	31.02	0.72	—	33.29
Kuala Abang	8.44	—	1.06	—	—	9.50
Jerudong	5.06	—	—	—	—	5.06
Branches Tutong Road	4.53	—	0.50	—	—	5.03
Limbang Road	5.75	—	—	—	—	5.75
Bangar Pandaruan	3.00	—	—	—	—	3.00
TOTAL	47.00	8.44	37.57	1.55	0.26	94.82

APPENDIX "Q"

BRIDLE PATHS.

	<i>Miles.</i>
Kota Batu	3.79
Belakang Subok	3.00
Kianggeh	1.29
Jalan Tongkadi	0.59
Mulaut	0.84
Jalan Serasa	1.37
Plumpong	0.96
Bangar Batu Apoi	1.50
Bangar Old Customs	3.00
Kiarong	1.53
Limau Manis	1.73
Buang Sakar Kasat	2.50
TOTAL ...	22.10 miles.

APPENDIX "R"

GOVERNMENT OF BRUNEI INFORMATION SERVICE.

BRUNEI.

READING ROOM ANNUAL REPORT 1953.

Month	R A C E				Total
	Malay	Chinese	Indian	European	
February	455 persons	152 persons	11 persons	—	618 persons
March	376 "	164 "	12 "	1 person	553 "
April	438 "	272 "	23 "	—	733 "
May	805 "	252 "	5 "	—	1,062 "
June	663 "	284 "	5 "	—	952 "
July	1,041 "	285 "	8 "	—	1,334 "
August	745 "	250 "	5 "	1 person	1,001 "
September	872 "	247 "	1 person	1	1,121 "
October	949 "	249 "	27 persons	—	1,225 "
November	841 "	173 "	7 "	—	1,021 "
December	787 "	191 "	8 "	—	986 "
TOTAL	7,972 persons	2,519 persons	112 persons	3 persons	10,606 persons

APPENDIX "S"

BRUNEI

BRITISH RESIDENTS

	1906/May	1907 — M. S. H. McArthur
May	1907/Dec.	1907 — H. Chevallier
Jan.	1908/Apr.	1908 — M. S. H. McArthur
Apri.	1908/Sept.	1909 — J. F. Owen
Sept.	1909/Nov.	1909 — B. O. Stoney (Acting)
Nov.	1909/Nov.	1913 — H. Chevallier
Nov.	1913/Dec.	1914 — F. W. Douglas
Jan.	1915/May	1916 — E. B. Maundrell
May	1916/Mar.	1921 — G. E. Cator
Mar.	1921/Mar.	1923 — L. A. Allen
Mar.	1923/Feb.	1926 — E. E. F. Pretty
Mar.	1926/Mar.	1927 — O. E. Venables
Mar.	1927/May	1928 — E. E. F. Pretty
May	1928/Jan.	1929 — P. A. B. McKerron
Jan.	1929/Aug.	1929 — R. J. F. Curtis
Aug.	1929/Sept.	1931 — P. A. B. McKerron
Sept.	1931/Oct.	1934 — T. F. Carey
Nov.	1934/Jan.	1937 — R. E. Turnbull
Jan.	1937/Dec.	1939 — J. Graham Black
Jan.	1940/Dec.	1941 — E. E. Pengilley
July	1946/Jan.	1948 — W. J. Peel
Jan.	1948/Aug.	1948 — L. H. N. Davis
Aug.	1948/June	1951 — E. E. F. Pretty
July	1951/June	1953 — J. C. H. Barcroft
June	1953/	— J. O. Gilbert

APPENDIX "S"—(Contd.)

ASSISTANT RESIDENTS

May	1905/May	1907 — F. A. S. McClelland
May	1907/June	1908 — J. C. Sugars
June	1908/Feb.	1910 — B. O. Stoney
Mar.	1910/May	1911 — W. H. Lee-Warner
Mar.	1911/Jan.	1913 — E. A. Dickson
Jan.	1913/1914	— H. H. Lee-Warner
	1914/1930	— Abolished
Jan.	1931/Sept.	1931 — T. F. Carey
Oct.	1931/Sept.	1933 — R. C. Gates
Aug.	1933/Apr.	1935 — A. Glencross
Apr.	1935/Mar.	1936 — D. A. Somerville
Mar.	1936/May	1938 — H. Hughes-Hallett
May	1938/Apr.	1940 — E. C. C. Barrett
May	1940/Dec.	1941 — R. N. Turner
July	1946/Jan.	1947 — C. J. Briscoe
Jan.	1947/Dec.	1947 — N. H. Wood
Dec.	1947/Mar.	1949 — D. C. I. Wernham
Mar.	1949/Oct.	1949 — I. Harper (Kuala Belait)
Oct.	1949/June	1950 — I. Harper (Brunei)
Oct.	1949/Mar.	1951 — R. C. S. Bell (Kuala Belait)
Sept.	1950/Oct.	1951 — P. Scanlon (Brunei)
Mar.	1951/Nov.	1953 — G. A. T. Shaw (Kuala Belait)
Oct.	1951/Apr.	1952 — R. G. Keech (Brunei)
Apr.	1952/Apr.	1953 — M. M. McSporran (Brunei)
Nov.	1953/	— H. P. K. Jacks (Kuala Belait)
Apr.	1953/	— J. T. Weekes (Brunei)

NOTE: The appointment of Assistant Resident was abolished in 1915 and was not recreated until 1931 consequent upon the development of the Seria Oilfields, Kuala Belait. The appointment of Assistant Resident Brunei was created in October 1949.

UNIVERSITY OF
MINNESOTA LIBRARY



COLONIAL REPORTS

Brunei
1954

LONDON

HER MAJESTY'S STATIONERY OFFICE

1955

SIX SHILLINGS NET



Gt. Brit Colonial Office.

STATE OF BRUNEI



ANNUAL REPORT

1954

Crown Copyright Reserved

PUBLISHED IN GREAT BRITAIN BY
HER MAJESTY'S STATIONERY OFFICE, LONDON

1955

(PRINTED IN SARAWAK)

319.91

G718

CONTENTS

CHAPTER

PAGE

PART I

1.	GENERAL REVIEW OF 1954	1
----	-------------------------------	---

PART II

1.	POPULATION	9
2.	OCCUPATION, WAGES AND LABOUR ORGANISATION	13
3.	PUBLIC FINANCE AND TAXATION	21
4.	CURRENCY AND BANKING	27
5.	COMMERCE	29
6.	PRODUCTION	31
7.	SOCIAL SERVICES	63
8.	LEGISLATION	111
9.	JUSTICE, POLICE AND PRISON	115
10.	PUBLIC WORKS AND UTILITIES	129
11.	COMMUNICATIONS	149
12.	PRESS, BROADCASTING, FILMS AND GOVERNMENT INFORMATION SERVICES	165

PART III

1.	GEOGRAPHY	171
2.	HISTORY	173
3.	ADMINISTRATION	179
4.	WEIGHTS AND MEASURES	181

APPENDICES

A.	PRINCIPAL IMPORTS FOR THE YEAR 1953 AND 1954	184
B.	PRINCIPAL EXPORTS FOR THE YEAR 1953 AND 1954	189
C.	STATISTICS OF LAND APPLICATIONS	190

1516082

CONTENTS—(Contd.)

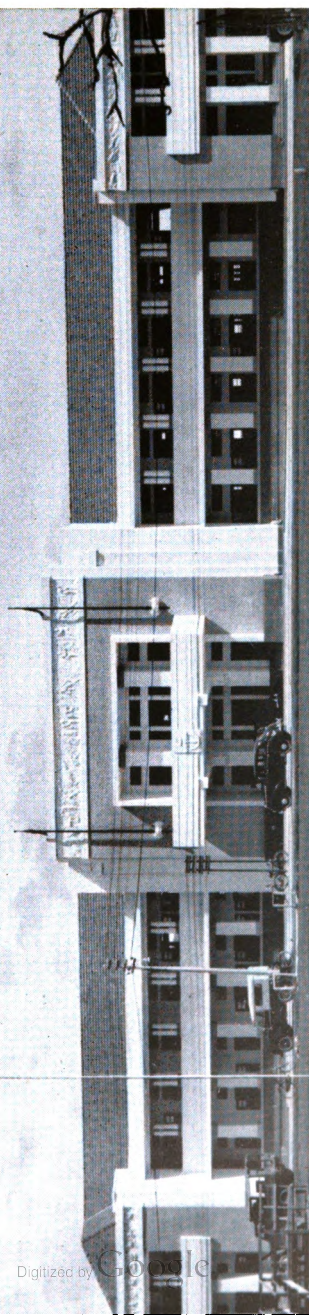
	PAGE
D. MONTHLY RAINFALL FOR 1954 AND PREVIOUS RECORDS COMPARED WITH 1954	191
E. GLOSSARY OF VERNACULAR NAMES AND TERMS	192
F. CONSTITUTED AND PROPOSED FOREST RESERVES	193
G. OUTTURN IN SOLID CUBIC FEET OF TIMBER AND FUEL 1954	194
H. OUTTURN OF MINOR FOREST PRODUCE 1954 ...	194
I. CRIME STATISTICS — 1954	195
J. EXPENDITURE ACCOUNT — 1954 (ELECTRICAL DE- PARTMENT)	196
K. STATEMENT OF ACCOUNTS — 1954 (ELECTRICAL DEPARTMENT)	197
L. PROFIT AND LOSS (ELECTRICAL DEPARTMENT) ...	198
M. REDEMPTION FUND (ELECTRICAL DEPARTMENT) ...	198
N. BALANCE SHEET 1954 (ELECTRICAL DEPARTMENT)	199
O. BRUNEI — BRITISH RESIDENTS AND ASSISTANT RESIDENTS	200



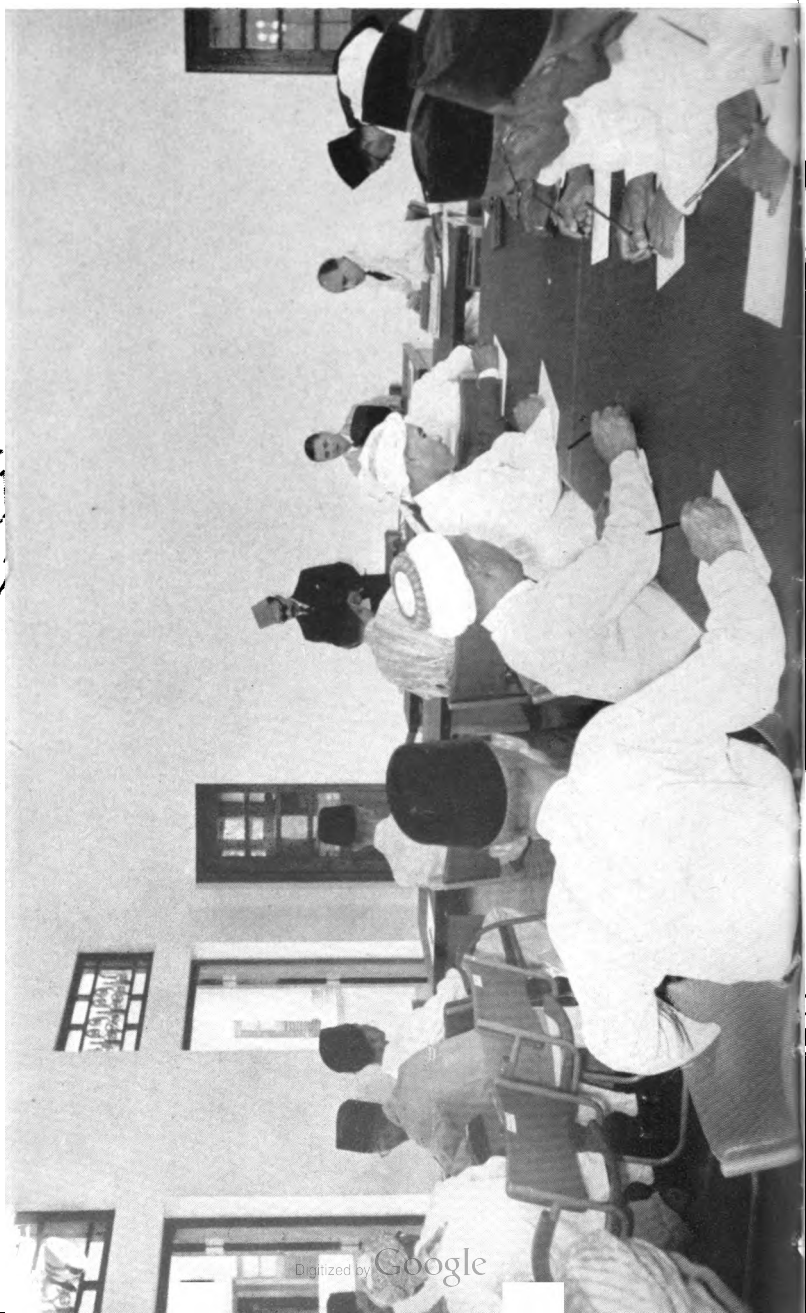
ILLUSTRATIONS

River Kampong, Brunei	...	...	...	<i>frontispiece</i>
Government Offices, Brunei	...	...	...	<i>overleaf</i>
Opening of first meeting of District Advisory Council, Brunei	...	...	...	<i>facing page 1</i>
Silversmith at work	...	...	...	<i>facing page 16</i>
Trainees at work in the B.M.P. Company's Trades School at Seria	...	...	...	<i>facing page 17</i>
Bali Cattle	...	...	...	<i>facing page 32</i>
Padian (River) Hawkers, Brunei	...	...	...	<i>facing page 33</i>
Part of new gas processing plant at Seria	...	...	...	<i>facing page 48</i>
Part of the industrial area of Seria Oilfield	...	...	...	<i>facing page 49</i>
Kuala Belait Bazaar	...	...	...	<i>facing page 96</i>
Seria Bazaar	...	...	...	<i>facing page 97</i>
Berakas Airstrip	...	...	...	<i>facing page 144</i>
Malayan Airways Feeder Service	...	...	...	<i>facing page 145</i>
New Mosque, Seria	...	...	...	<i>facing page 160</i>
M.V. Perlis, Straits Steamship alongside Brunei wharf	...	...	...	<i>facing page 161</i>
Map of State of Brunei	...	...	...	<i>end cover</i>

PART I.



Opening of first
meeting of District
Advisory Council
Brunçi.



PART I.

GENERAL REVIEW OF 1954

THE year 1954 must be described, primarily as a year of planning, rather than a year of spectacular development.

A prospective visitor who had been reading about Brunei beforehand and who arrived here at the end of 1954 would probably have been disappointed in what he saw. 1954 was a year in which many new projects had been started, and by the end of the year had only reached the untidy stage, where little improvement was noticeable, although much spade-work on the foundations, etc., had been completed. This not only applied to work of material construction such as roads, buildings, etc., but also to other schemes such as Old Age Pensions, Medical and Educational development plans.

The Development Plan has of course brought in its wake the usual difficulties which are inevitable, housing shortages, servant and labour shortages, the necessity to recruit labour overseas and consequently the necessary tightening up of immigration rules. The appalling weather conditions of heavy and continuous rainfall experienced for the last quarter of the year, greatly handicapped the Public Works Department on all their outside work, and gave the appearance that the roads and building areas were a quagmire of mud and sand.

The arrival of the Commissioner of Development in October, 1954, was a most useful addition to the British Resident's Office staff, and we are now sure that the planning and co-ordination of the Development Plan is in experienced and competent hands. Progress under the Development Plan will be dealt with in greater detail later in this section, but generally speaking progress can be said to have been satisfactory in spite of the shortage of experienced staff.

The Constitution Committee, which was set up by His Highness the Sultan in 1953, toured the Federation of Malaya during

the early part of 1954, and submitted their final report to Government in March, 1954. The report has been studied by His Excellency the High Commissioner, and his advisers, and in November an officer of the Attorney-General's Office, Sarawak, was seconded to Brunei in order to draft the Constitution and other ordinances pertaining to the Constitution and local Government. During the time this officer was engaged on this work he was closely in touch with His Highness the Sultan and His Highness's advisers.

In 1954, His Highness and his advisers having studied the report made by the Constitution Committee, decided to introduce the first step, and on 11th September, 1954, the first District Advisory Councils were formed, all members in the first place being appointed by His Highness. Each District Advisory Council was empowered to appoint observers to State Council who, on giving the necessary notice, would be allowed to address Council on any matters relating to their District, and could also be called upon to address State Council regarding any matter on which His Highness might wish them to speak.

The ancient Malay ceremony of ear-piercing (Istiadat Bertindek) of the two Princesses took place in Brunei on 29th April. From 24th April to 1st May elaborate ceremonies and celebrations leading up to the final ear-piercing ceremony took place, and all Brunei was *en fete*. Many distinguished visitors were invited to Brunei for these ceremonies, including His Excellency the Right Honourable Mr. Malcolm MacDonald, Commissioner-General for South East Asia, His Excellency Sir Anthony Abell, K.C.M.G., High Commissioner for Brunei and Governor of Sarawak, and His Excellency Mr. R. E. Turnbull, C.M.G., Governor of North Borneo. During this week His Highness inaugurated the awarding of his Brunei Honours and Awards, which included the Most Esteemed Family Order, and the Crown of Brunei. At a special ceremony during this week His Highness was graciously pleased to present the Most Esteemed Family Order, First Class, to the High Commissioner Sir Anthony Abell, K.C.M.G. At an impressive ceremony during the same week, the High Commissioner, on behalf of Her Majesty the Queen, presented the insignia of Knight Commander of the Order of St. Michael and St. George (Honorary) to His Highness the Sultan.

Owing to a late start on secondary education in the State, Brunei still suffers from the shortage of well-educated boys to fill the permanent posts in Government. It is therefore necessary and will be for some years, to fill most of the appointments on contract from outside the State, an expensive and not altogether satisfactory solution, as the appointments, having no security of tenure, are not sufficiently attractive unless high salaries are paid. The Education Plan, is notwithstanding progressing well up to expectations and secondary education made good strides during 1954. It will, however, be four more years at least before we can expect to have local boys (in any numbers) up to Higher Cambridge standard.

The Education Development Plan was published during 1954 and this is dealt with in detail elsewhere in this Report. During the year a tremendous drive was undertaken with a view to encouraging more girls to enter the schools. In this days of progress and enlightenment, it is considered most essential that the education of girls should not lag too far behind the education of boys. Although there was an increase of approximately 200 girls in the schools in 1954, there are still more than three times as many boys as there are girls in the vernacular schools. Approximately eighty percent of the population of boys of school age were attending schools within the State at the end of the year.

Much attention has been paid during the year to sending Brunei officers overseas for training. It has been difficult to fit existing officers into the usual courses sponsored by the Colonial Office, owing to their low educational qualifications, but no pains have been spared by the authorities at home in endeavouring to comply with our requests and, when necessary, special courses have been planned.

The training of teachers for schools has always been a difficulty which has had to be faced, and during the year arrangements were made whereby Malays from the Federation who opted to work with the Brunei Education Department for five years would be sent for training to Kirkby College in England under the auspices of the Federation Education Department. Arrangements were also made with the Government of North Borneo for the training of Brunei lady teachers at Kent College in North Borneo. There

is, therefore, every hope that many educational problems will be solved when these teachers complete their training in approximately three years time, and we then hope to have a steady flow of trained teachers in the Education Department.

During the year a State Controller of Labour was appointed and a small but efficient Labour Department was established. Owing to the very considerable increase of immigrant labour to meet the demands of the Development Plan and the oil industry, this became a requirement very much needed in Brunei. During the latter part of the year the Controller was busy drafting the necessary legislation to deal with this problem and satisfy the requirements of the International Labour Convention as applicable to Brunei.

There were no major labour troubles during the year and there was no unemployment, in spite of the low price of rubber. Considerable numbers of skilled and semi-skilled workers were recruited from Hong Kong and Malaya by the British Malayan Petroleum Company and also by contractors in order to carry out the projects approved under the Development Plan. For the same reason a very heavy burden was placed on the Immigration staff of the Police Department, and it was necessary to approve considerable increases in staff and to reorganise this section of the Department in order to enforce the Immigration rules and regulations. The present Immigration Ordinance and machinery proved inadequate to safeguard the State against the new invasion of immigrants wishing to get into Brunei, and the matter of a new Immigration Ordinance has been under discussion during the year.

The main industry of the State continued to be the production of oil by the B.M.P. Company at Seria. Negotiations which had been proceeding for several years with the Shell Company concerning the existing and new leases, were practically completed to mutual satisfaction by the end of the year. Relations between the Shell Company and Government in the matter of conducting business continued in the most cordial manner. The exploration for new fields in the State continued at higher pressure. Details of the Company's programme for the year are dealt with in detail elsewhere in this report.

DEVELOPMENT

After the war construction facilities available were concentrated mainly on rehabilitation. That phase ended in 1953 when a Summary of Proposals for development over the five year period 1953-1958 was published, and the State Council set aside a sum of \$100,000,000 for the purpose.

Schemes proposed come under the following heads:—

<i>Social Services:</i>	Pensions, Resettlement.
<i>Agriculture:</i>	Rubber improvement, Irrigation and Mechanical Cultivation of Padi.
<i>Communications:</i>	A trunk road to Kuala Belait, and feeder roads; improvement of wharves and port facilities; automatic telephone exchanges; and the provision of an aerodrome.
<i>Towns:</i>	Planning and sewerage; reclamation and anti-erosion works; water supplies and electricity.
<i>Education:</i>	Thirty new schools to be provided, and scholarships to oversea institutions, and free meals to day schools.
<i>Medical:</i>	A new hospital at Kuala Belait; travelling dispensaries; anti-malarial work; the training of nurses and extended maternity and ante-natal work.

A Development Committee representative of all parts of the State was formed and the details of each project are considered by this Committee before being passed to the State Council for approval and the provision of funds. In this way schemes totalling \$53,143,459 were approved leaving an uncommitted balance at the end of the year of \$46,856,541.

The scope of the various proposals was such that they could not be implemented by existing staff and it became necessary to recruit additional staff. It was decided to appoint a Commissioner of Development; a Pensions Adviser was obtained and steps were taken to obtain additional engineers, chiefly for roads. The Pensions Adviser and Commissioner of Development assumed duty during the year, and a Pensions Enactment was passed by the

State Council at its December meeting. But progress with the Development Plan did not await these appointments. Development activity is reported on by departmental heads in the appropriate section of this report.

In addition to staff much heavy equipment for the road, land reclamation, and aerodrome programmes had to be obtained and by the end of the year local Malays had been trained and were operating this machinery with considerable skill despite their lack of previous experience.

Estimated expenditure on development during the year was \$7,044,244.

Schemes now approved can be divided into three groups and the following shews the allocation of funds to date:—

Economic Schemes and Communications:	... \$33,908,500
Health Education and Welfare	... \$14,024,459
Administration and Equipment:	... \$ 5,210,500

Financial provision for development work has now been incorporated in special development estimates which are printed and published separately from the main State Estimates. This will serve as a ready reference work on the scope and progress of the plan. The State is in an exceptional, if not a unique position in that ample funds are available: but this removes only one of the limiting factors governing the rate of development. Apart from staff shortages, other limiting factors experienced during the year have been labour shortages, especially in the skilled grades, and a serious shortage of stone which affects both building and road construction. These difficulties are being countered and by the end of 1954 the development programme was clearly gaining momentum.

The following is a list of important people who visited the State during the year:

H.E. Sir Anthony Abell, K.C.M.G., High Commissioner.

H.E. Mr. C. J. Thomas, C.M.G., Acting High Commissioner.

H.E. the Rt. Hon. Malcolm MacDonald, Commissioner General for South-East Asia.

H.E. Mr. R. E. Turnbull, C.M.G., Governor of North Borneo.

Sir Thomas Lloyd, G.C.M.G., Permanent Under-Secretary of State.

The Rt. Rev. the Bishop of Borneo.

The Flag Officer, Malayan Area, Rear Admiral Shattock, C.B.

Mr. I. Stourton, C.M.G., Deputy Inspector General, Colonial Police.

Mr. W. B. L. Monson, C.M.G., Assistant Under-Secretary of State.

Commonwealth Parliamentary Association Delegation—

Sir Roland Robinson

Mr. Ralph Assheton

Sir Robert Boothby

Mr. P. Morris

Mr. R. W. Sorensen.

Miss H. McSwiney, Commissioner of Girl Guides.

Lord Rowallen, Chief Scout.

Sir John Martin, K.C.M.G., Assistant Under-Secretary of State.

Mr. F. Grey, Inspector of the Australian Commonwealth Public Service.

Delegation from the Federation: Mr. E. Himsworth, C.M.G.,
Tengku Yaacob, and Inche Mustapha Albakri.

Officers and men from the Indian Navy Ship GODAVARI.

Mr. Van Den Bosch, Belgian Consul.

PART II.

Chapter I.

POPULATION

IN 1947, the year of the last census, there was considered to be 40,670 persons living in the State of 2,226 square miles, thus giving a density of population of 18.2 persons per square mile.

Further details carried out during 1947 gave the various racial groupings as follows—

Malays (Brunei)	...	...	49.00%
Kedayans	...	...	17.00%
Dayaks	...	...	3.50%
Muruts	...	...	0.50%
Dusuns	...	...	7.00%
Chinese	...	...	19.00%
Indian	...	...	1.50%
Europeans	...	...	1.50%
Others	...	...	1.00%

Since 1947 it is estimated that the population increased gradually until the figure of 56,000 was reached in 1953. During 1954, 22,289 males and 8,781 females entered the State, a total of 31,070; on the other hand, 21,239 males and 8,067 females left the State; a total of 29,306 or a gain of 1,764 persons.

In addition to this a certain number of babies arrived, and a few people died. The births totalled 3,332; the deaths 776. The nett gain in population of the State was, therefore, 4,330, thus bringing the total estimated population to 60,330.

The following table shows detail of Nationality of Immigrants during the year—

**RETURN OF PERSONS ENTERING & LEAVING THE STATE OF BRUNEI
FOR THE YEAR 1954**

<i>Nationality (In alphabetical order)</i>	<i>Entering</i>		<i>Leaving</i>		<i>Nett</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>		
American ...	34	22	33	12	+	11
British Indigenous	1,381	520	1,381	505	+	15
British Dayaks ...	1,361	186	1,377	194	-	24
British Malays ...	5,167	2,396	4,981	2,241	+	341
British Non-Indigenous ...	696	392	548	303	+	237
Burmese ...	47	26	44	25	+	4
Chinese (British & Aliens) ...	11,869	4,766	11,216	4,352	+	1,067
Dutch ...	283	124	319	140	-	52
French ...	6	2	5	2	+	1
Indian & Pakistanis	1,075	191	931	138	+	197
Indonesian ...	67	29	89	28	-	21
Swiss ...	30	9	30	13	-	4
Others ...	273	118	285	114	-	8
GRAND TOTAL	22,289	8,781	21,239	8,067	+	1,764

A study of the above table shows that very many more Chinese entered the State than any other Nationality. This is easily accounted for. This increase represents almost entirely an inflow of Chinese labourers on contract work, and they will only be in the State for a maximum period of 3 years.

There was a slight increase in the Indian population. Under present immigration laws, The Aliens Enactment, all persons entering the State other than Brunei subjects, were permitted varying periods of stay. There were no restrictions on persons leaving the State, unless they were required for purposes under the Criminal Laws.

The National Registration Department under the control of the Administration, issued National Registration Cards to all persons who were legally resident in the State, with the exception of those persons entering for short periods in connection with business or on social visits.

ERRATA

On page 11 — 1954 Infant Mortality rate of 93.6 should read 99.6 and Death Rate per Mille for 1954 should read 12.69 instead of 18.83.

The tables of Births and Deaths indicate an Infant Mortality rate of 93.6 and the following table gives this rate over the period 1947-1954—

1947	...	...	...	202.7	per 1,000
1948	...	...	...	258.5	per 1,000
1949	...	...	...	128.3	per 1,000
1950	...	...	...	136.9	per 1,000
1951	...	...	...	80.9	per 1,000
1952	...	...	...	103.9	per 1,000
1953	...	...	...	113.3	per 1,000
1954	...	...	...	93.6	per 1,000

The United Kingdom rate for 1953 was 28 per 1,000.

ERRATA

On page 11 — 1954 Infant Mortality rate of 93.6 should read 99.6 and Death Rate per Mille for 1954 should read 12.69 instead of 18.83.

Total Deaths	...	708	865	808	766
Male	...	382	470	447	415
Female	...	326	395	361	351
Death Rate per Mille		17.4	21	19.9	18.83

Note: Births and Deaths Registration was introduced in 1922. The State Medical Officer is the Registrar of Births and Deaths. Deputy Registrars comprise Dispensary Assistants, District Officers, Tua² Kampongs and Captain Chinas. Other than in the three main Hospitals, the accuracy in connection with Births and Deaths cannot possibly be guaranteed. It has been noted, however, that the outstation Deputies are doing more and more in an endeavour to keep proper records. The time may come when a separate Registration Office with trained outstation personnel will be established.

Distribution of Population:

The bulk of the people of Brunei live in the two main urban areas, namely, Kuala Belait/Seria (36,000) and Brunei Town (16,000). The former area covers the British Malayan Petroleum oil-fields, while Brunei Town is the Government Administrative Centre. The population in these two areas is Cosmopolitan.

The remainder of the population (8,000), live along the coast or up the 3 main rivers. The Malays are concentrated along this coastal strip and up the first few miles of the rivers. The character or distribution of the races up these rivers follows a fairly common pattern; in the lower reaches Malays, then in the following order as one proceeds up-river. Kedayans and Dusuns; Muruts and finally Ibans (Dayaks).

In one area (Ulu Belait), there is to be found, but only after careful pre-arrangement, a small group of Pusans—the real jungle people—or as sometimes referred to as The Wild Men of Borneo.

In the world famous Kampong Ayer (Water Village) over the River at Brunei Town, about 9,000 Malays live very much as they did several hundred years ago.

Chapter II.

OCCUPATION, WAGES AND LABOUR ORGANISATION

BRUNEI State has a wide variation in the type of occupation offered. At one end of the scale is the cultivation of small holdings by the rural indigenous population engaged in self-sufficient pursuits such as agriculture fishing or the harvesting of jungle produce. At the other is the oilfield of Seria, where employment and in many cases preliminary training, is available in many of the skilled, unskilled and artisan trades incidental to an oil company.

Unemployment does not exist as, apart from the British Malayan Petroleum Company and the four rubber estates, where there is a shortage of labour, the remainder of the population is engaged in peasant agriculture.

The increase in the price of rubber towards the end of the year has not yet induced any smallholder production revival in Brunei. However, market gardening in the western area of the State continued to expand in order to meet the increasing oilfield area's demand for fresh vegetables.

With a similar output of crude oil in 1953 Seria oilfield continued to expand in size during 1954.

By the end of 1954 the British Malayan Petroleum Company Limited at Seria had in its service 1,277 European and Asian staff and a Labour Force of Asians, composed as follows:—

<i>Nationality</i>		<i>Unskilled</i>	<i>Skilled</i>	<i>Total</i>
Chinese	...	645	1,173	1,818
Malays	...	735	1,057	1,792
Indians	...	104	640	744
Dayaks	...	412	133	545
Javanese	...	14	31	45
Others	...	2	13	15
Total		1,912	3,047	4,959

Wage Policy:

The basic rates of pay range from \$3.56 for unskilled to \$9.30 per diem for the highest skilled artisans. Out of 5,000 workers employed by the Company 600 only are on minimum rates and this figure is likely to decrease.

Some additional 2,580 workers are employed by contractors operating on behalf of the Company within the oilfield area. The Company endeavours to safeguard the interest of such labour by inserting in the contract a clause binding the Contractor to observe all Brunei legislation effecting the conditions of employment in the State. Constant scrutiny and inspection is undertaken both by the Company and the Controller of Labour to ensure that such legislation is observed.

Additional features of the Company's wage policy include a temporary cost of living allowance at the rate of 25% of basic pay for married and 15% for single workers, schemes of allowances for workmen working in areas where living accommodation, amenities, etc. are temporarily below the standard provided elsewhere. Other allowances additional to normal pay are given for such work as diving, work of an exceptionally dirty nature, standing by, etc.

Hours of work are 43½ per week, the working week consisting of 5½ days. Shift workers do, however, work 6 shifts of 8 hours per week; but these men are paid a bonus for the afternoon and night shift.

Fifty percent extra pay is paid for all overtime worked. Employees receive annually a week's leave with pay and when absent from work through sickness, they receive full pay and cost of living allowance for the first 4 weeks and half pay plus half cost of living allowance for the next 8 weeks.

On retirement the Company pay an exgratia payment in accordance with its own regulations on the basis of service and last rate of pay.

Of the welfare and amenities provided by the Company for its staff and workers the following are of interest:—

Health and Medical Services:

From the beginning the Company has provided its own medical and health services. These have been open not only to employees, but also to their dependants. The Company operates a well equipped hospital at Kuala Belait with modern X-Ray installations and full equipment for medical and surgical treatment and laboratory examinations. In addition to the hospital there are dispensaries and First Aid points throughout the oilfield to deal locally with staff and labour. These are coupled with an emergency medical and ambulance service which covers the oilfield areas and conveys patients rapidly to the Kuala Belait hospital. For maternal and child Welfare the Company runs a pre-and post-natal clinic.

A joint Company and Government campaign against malaria is maintained. All new arrivals are checked for malaria infection and active measures are taken to eliminate the mosquitoes by draining and spraying potential breeding grounds.

Clubs:

There are four clubs for Labour Force employees in the Seria oilfield and each are run by a management committee elected from the club members. Although the policy is one of non-interference the Company takes great interest in their activities, assisting wherever necessary.

The amenities are constantly being extended and late in 1954 an impressive Community hall was completed and is available for boxing, amateur dramatics, meetings and other such functions.

Recreation and sports amongst its employees have always been strongly encouraged by the Company and the clubs each have their facilities and equipment for football, cricket, hockey, badminton, volley ball and other games.

For the Regional Staff (Senior Asian Staff) there is a recreation club offering similar facilities.

The Kuala Belait Recreation Club, the only club in the area with no Company affiliations continues to expand. An extension embodying a dance floor and dining room was completed during 1954. Members, including Company and Government employees

and members of the commercial community, with widely differing interests, have found it a most valuable common meeting ground. The number of members continues to increase and now totals 425.

Cinema:

The oil company operated a cinema of temporary open air construction at Seria. Shows were held on five nights a week and included British, American, Malay, Chinese and Indian films. With the opening of a new Cinema in a permanent building and seating 1,000, the former arrangements have ceased to operate.

Transport:

The oil company provides free transport for its workmen to and from work and for their dependants to and from the cinema and the local shopping centres at Seria and Kuala Belait. Regional and Senior Staff are provided with similar facilities.

Welfare Committees:

The Company believes that the goodwill and co-operation of staff and workers with management and supervision are guarantees of efficient production and to this end a community spirit has been developed and fostered through the social club facilities provided. Welfare Committees have been meeting once a month and the elected labour members are encouraged to discuss with the management representatives such subjects as working conditions, disputes, grievances or other matters effecting mutual relations and understanding.

With the development of the community spirit these Welfare committees will be substituted in 1955 by a Labour Force Committee with considerably broadened powers of discussion and representation from management. This committee will be divided into four sections—Malay, Chinese, Indian and Dayak, the first two with ten each members per section and the latter two with five members per section. Each section will meet independently once a month with the management representatives. The latter will be broadened and strengthened to include a Personal Department Chairman, the Assistant Operations Superintendent, a Senior Engineering representative and other representatives co-opted to accord with the agenda and the Department concerned.

Once a quarter a selected number of representatives from each section will meet together with the management representatives

work.



Trainees at work
in The B.M.P.
Company's Trades
School at Seria.



and form a General Committee to correlate the achievements and decisions of the Section Committees.

In this way an effective channel of communication exists between the Company and its workers with a view to encouraging mutual understanding and the spirit of the "square deal".

Housing:

The housing programme continues to progress and most labour and regional staff are now housed to a standard that compares favourably with any other oilfield in the world.

Safety:

Since 1950 the Company has made a great effort to improve safety precautions and to reduce its accident rate. A safety department under an experienced officer specially trained in Safety work is actively engaged in the investigation of accidents and the inspection of plant and operations. A detailed analysis of accident statistics is made in order to determine the chief causes and so indicate the type of campaign required to combat them e.g. whether by way of propaganda, mechanical safeguards, protective equipment, training, lectures or disciplinary action.

The safety department has the full support of management and by tact and enthusiasm has obtained the co-operation of Department Heads. This has enabled a considerable improvement in the overall accident frequency rate.

Education:

In addition to subsidizing the attendance of children of its workers at non-Company schools in Seria and Kuala Belait, the oil company runs a Trade School at Seria. This has had two divisions — a Preparatory Trade School and Technical Trade School. The Preparatory Trade School catered for boys whose standard of general education needed improving to standard IV to enable them to enter the Technical Trade School. This is now abandoned as the Company can now obtain the required number of standard V boys.

The Technical Trade School is a three-year apprentice course and gives practical training in fitting, turning, motor and diesel mechanics, welding and blacksmithing; on the theoretical side there is instruction in the theory of mechanics, workshop practice,

electricity, mathematics and machine drawing. During the first year the apprentices do a full time school course equally divided between the classroom and the school workshops. In the second and third years 70% of the time is spent in the Company's workshops and 30% in the classroom.

Entry to either Trade Schools has hitherto been open to pupils from any school in British Borneo but with the Brunei English School now reaching the stage in their development where they can provide candidates with secondary school qualifications the seeking of candidates from outside Brunei will be reduced.

To illustrate the growth of the Trade School the number of apprentices at the end of 1952 were 67. Comparable figures for 1953 and 1954 are respectively 100 and 130. The estimated figure for the end of 1955 is 154.

In 1953 the Company and the Government negotiated a Scheme whereby the Company would take 25 Brunei youths the following year. This Scheme is bearing fruit and these youths are now making good progress. A similar number will be taken into the School in June 1955 and in 1956.

The Company also grants a number of scholarships to the children of the Labour Force and Regional Staff to enable them to pass the Senior Cambridge Examination or to continue their technical studies. The recipient of these awards is in no way bound to enter Company employment on completion of the scholarship.

The following table shows the racial distribution of labour employed by the main sources of employment outside the oil company:—

<i>Race</i>	<i>Government (Public Works)</i>	<i>Rubber</i>	<i>Total</i>
Malays and Bruneis	1,608	373	1,981
Ibans	4	28	32
Chinese	61	6	67
Indians	10	1	11
Javanese	3	5	8
Others	16	9	25
	<hr/> 1,702	<hr/> 422	<hr/> 2,124

General:

With the exception of one minor strike Brunei State was free from labour unrest during 1954. This strike concerned twelve workers of the Peninsular Construction Company, a firm of Indian contractors employed by the Public Works Department. The strike lasted from the 8th to 16th November and incurred the loss of 768 man hours work.

In the middle of the year a Controller of Labour was appointed to deal with the implementation and supervision of Labour Legislation and the day to day handling of Labour problems.

The cost of living was stable during 1954. Taking 1951 as 100 the average cost of living throughout the year was 94. The limits of monthly oscillation were between the figures of 92 and 96. These figures are based on the cost of reasonable living requirements of a workman, his wife and three children.

On 23rd December, to amend and consolidate the law relating to labour, a new Labour Enactment was passed by the State Council, and with this enactment the State now complies fully with International Labour Conventions Nos. 5, 7, 15, 16, 50, 64 and 86.

Chapter III.

PUBLIC FINANCE AND TAXATION

Revenue and Expenditure:

THE estimated surplus of Revenue over Part I Expenditure for the year 1954 is \$73,370,906, some \$3 million less than in 1953. Comparative figures of Revenue and Expenditure for the year 1953 and the revised estimates for 1954 are given below:—

	1953 (Actual)	1954 (Partly Estimated)
	\$	\$
Revenue	98,976,643	95,933,104
Expenditure	22,646,697	22,562,198
Surplus	<u>76,329,946</u>	<u>73,370,906</u>

Revenue:

The total revenue declined by approximately \$3 million and the principal charges were as under:—

Increases:—	Customs Import Duties by ...	\$ 378,000
	Forest Royalties by	12,000
	Telecommunication Services by	30,000
	Electrical Dept. Revenue by ...	98,000
	Royalty & Mining Rents by ...	1,100,000
	Interest on Instalments by ...	2,400,000
Decreases:—	Revenue derived from Income Tax fell by over \$6 million.	

The details of revenue under the main heads are shown below:—

	1953 (Actual)	1954 (Partly Estimated)
	\$	\$
Duties, Taxes and Licences ...	65,293,794	58,845,608
Fees of Courts etc.	205,907	372,295
Government Undertakings ...	516,785	688,605
Revenue from Government		
Property	25,688,983	26,811,695
Interest	6,640,452	8,655,656
Miscellaneous	501,313	415,895
Land Sales	129,409	143,350
	<u>\$98,976,643</u>	<u>\$95,933,104</u>

Expenditure:

The total Part I Expenditure in 1954 was little changed from 1953 at a figure of \$22,562,198.

The main Heads of Expenditure are shown hereunder:—

	1953 (Actual) \$	1954 (Partly Estimated) \$
Pensions, Retiring Allowances etc.	80,835	165,621
His Highness the Sultan	323,992	312,829
Ministers	59,073	63,119
British Resident	101,812	122,357
Assistant Resident, Belait	52,162	56,170
Agriculture	597,277	517,411
Audit	21,672	28,833
Co-operative Development	3,226	—
Customs and Marine	657,585	531,500
Education	618,120	784,015
Electrical	560,116	542,200
Forests	86,796	99,683
Information Service	61,698	74,278
Judicial	44,078	27,021
Labour	—	15,261
Land and District Officers	716,811	465,790
Legal	14,232	25,713
Medical and Health	1,101,213	1,396,098
Miscellaneous Services	3,678,036	1,801,451
Municipal	291,751	432,026
National Registration	3,073	3,802
Police	722,598	853,044
Postal Services	184,153	213,966
Prisons	—	59,370
Public Works	276,194	339,365
Public Works Annually Recurrent	1,265,045	1,399,778
Public Works Non-Recurrent	10,109,938	10,956,194
Religious Affairs	77,611	92,752
Supplies	257,203	224,634
State Customs & Religious and Welfare	—	8,288
State Stores	—	—
Survey	333,786	417,591
Telecommunications	293,927	450,563
Treasury	52,684	81,475
Total Part I Expenditure	\$22,646,697	\$22,562,198

The schemes under the Development Plan progressed in 1954 and Expenditure (Part II) totalled \$7,228,693. Expenditure was divided into the following main Heads:—

	1953 (Actual) \$	1954 (Partly Estimated) \$
Agriculture	800,000	30,336
Government Buildings ...	2,376	59,250
Housing	—	263,301
Medical	—	29,703
Miscellaneous	—	20,341
P.W.D. Compounds	—	459,855
P.W.D. Heavy Equipment ...	—	281,379
Roads and Bridal Paths ...	170,320	3,088,549
School Feeding Scheme ...	21,325	393,797
Settlement Scheme	437	116,413
Water Supplies	11,642	21,134
Airport	—	198,341
Public Works, Workshop and Mobile Maintenance ...	—	411,901
River Wall	—	200
Swamp Filling	—	964,462
Wharf, Kuala Belait	—	137
Electrical	—	426,064
Education	—	110,297
International Club	—	422
Service Housing	—	193,587
Education, Housing & Building	—	72,993
Water Supplies	—	75,651
Development Plan Fund ...	—	98
Administration and Equipment	—	10,482
Total Development Plan Expenditure	\$1,006,100	\$7,228,693

Financial Statement:

The Statement of Assets and Liabilities as at 31st December, 1953, is set out hereunder:—

ASSETS

Previous Year

1953

\$				\$
1,074,928	Cash in Treasury & Banks	...	...	9,077,071
11,168	Current Accounts etc.	...	...	7,582
3,788,572	Joint Colonial Fund	...	...	9,720,000
	Investments:			
61,304,993	General Reserve Fund	...	...	128,969,115
74,664,277	Surplus Balances	...	...	77,177,467
1,085,868	Loans	...	...	1,058,507
1,528,144	Advances	...	...	1,678,877
196,075	Suspense	...	...	154,882
865,610	Supply Depot	...	...	215,262
<u>144,519,635</u>				<u>228,058,763</u>

LIABILITIES

\$				\$
747,959	Deposits	...	...	746,814
783,902	Current Accounts	...	...	1,407,913
61,304,992	General Reserve Fund	...	...	128,969,115
81,682,782	General Revenue Balances	...	...	95,941,021
—	Development Fund	...	...	993,900
<u>144,519,635</u>				<u>228,058,763</u>

During 1954 a further sum of \$6,000,000 was transferred to General Reserve Fund and a sum of \$98,000,000 allocated from Surplus Fund Balances to the Development Fund.

Public Debt:

There is no public debt.

Customs Tariff:

The Customs Tariff is divided into two parts, namely—Import Duties levied on Intoxicating Liquors, tobacco, sugar, petroleum products, textiles and a variety of other products and Export Duties levied on rubber, copra, sago livestock and sundry other products. Total import duty in 1954 amounted to \$4,433,943 and export duty totalled only \$58,531.

There was no change in the tariff in 1954.

Excise, Stamp Duties and Other Taxes:

Excise duty is levied on locally distilled samsu, which is the only alcoholic beverage manufactured for sale in Brunei.

Stamp Duties are levied on all documents required to be stamped under the provisions of the Stamp Enactment, and include a stamp duty on cheques, bills of exchange etc., and affidavits and contracts.

Estate Duty is levied under the Stamp Enactment upon all estates the value of which exceeds \$1,000 and the rates are as follows:—

Where the principal value of the estate;

exceeds \$	1,000	and does not exceed \$	5,000—	1%
exceeds	5,000	and does not exceed	10,000—	2%
exceeds	10,000	and does not exceed	25,000—	3%
exceeds	25,000	and does not exceed	50,000—	4%
exceeds	50,000	and does not exceed	100,000—	5%
exceeds	100,000	and does not exceed	150,000—	6%
exceeds	150,000	and does not exceed	200,000—	7%
exceeds	200,000	and does not exceed	300,000—	8%
exceeds	300,000	and does not exceed	400,000—	9%
exceeds	400,000	and does not exceed	500,000—	10%
exceeds	500,000	and does not exceed	750,000—	11%
exceeds	750,000	and does not exceed	1,000,000—	12%
exceeds	1,000,000	and does not exceed	1,250,000—	13%
exceeds	1,250,000	and does not exceed	1,500,000—	14%
exceeds	1,500,000	and does not exceed	2,000,000—	15%
exceeds	2,000,000	and does not exceed	3,000,000—	16%
exceeds	3,000,000	and does not exceed	5,000,000—	17%
exceeds	5,000,000	and does not exceed	7,000,000—	18%
exceeds	7,500,000	and does not exceed	10,000,000—	19%
Over	10,000,000	... ..	...	—20%

Income Tax:

Income tax is charged, levied and collected under the provisions of the Income Tax Enactment 1949, but at present only in respect of the incomes of registered limited Companies. On every dollar of the chargeable incomes of such Companies Income Tax is levied at the rate of 30%. There are reliefs in respect of tax paid in some other Commonwealth countries.

Chapter IV.

CURRENCY AND BANKING

Currency:

THE State is a party to the Malayan Currency Agreement and only currency issued by the Board of Commissioners of Malayan Currency is legal tender in Brunei.

On 31st December, 1954, the amount of Malayan currency in circulation in Brunei was estimated at \$43,313,193 an increase of \$10,114,804 during the year.

Banking:

Banking facilities in Brunei are provided by the Hongkong and Shanghai Banking Corporation with Branches at Brunei Town and Kuala Belait. During 1954 Savings Bank facilities were added to the services provided by this Bank and at the close of the year 294 such accounts had been opened with deposits totalling \$486,481.

Post Office Savings Bank:

The number of depositors in the Post Office Savings Bank at the end of 1954 was 1,665 compared with 1,399 at the end of 1953. The growth of the Savings Bank is illustrated in the following table:—

<i>Year</i>		<i>Number of Depositors</i>	<i>Amount of Deposits</i>
31st December 1950	...	759	\$195,455
31st December 1951	...	928	265,605
31st December 1952	...	1,162	374,122
31st December 1953	...	1,399	521,378
31st December 1954	...	1,665	608,589

Chapter V.

COMMERCE

TRADER and Commerce in Brunei is conducted largely by the Agency Houses and Chinese Merchants. The most important of the Agency Houses are the leading European Companies, but many of the Chinese Firms hold valuable agencies. All have long established connections with principals or general exporters in Singapore, and the bulk of the imports comprise purchases in Singapore, with the exception of the imports by the British Malayan Petroleum Company. Direct purchases from the United Kingdom, Australia and other sources are increasing however.

The whole of the Import and Export trade is carried on in the two ports of the State, Brunei Town and Kuala Belait and it is in these two towns that the principal firms have established their businesses.

External Trade:

The value of the external trade of the State for the year 1954 was \$373,357,401 compared with \$396,315,275 in 1953, a decrease of \$22,957,874. The trade figures are made up as follows:—

	1954	1953
Total value of Exports	\$273,476,507	\$282,593,113
Total value of Imports	99,880,894	113,722,162
Favourable Trade Balance	<u>\$173,595,613</u>	<u>\$168,870,951</u>

Exports:

The value of exports of Crude Oil declined by \$1,755,275 and of plantation rubber by \$518,451.

Imports:

The value of mining construction and other industrial machinery and of building materials decreased considerably in 1954 and accounts for most of the reduction in the value of imports.

Customs Revenue:

The Customs Revenue for 1954 amounted to \$4,492,475 made up as follows:—

			1954	1953
Export Duties	...	...	\$ 58,532	\$ 88,848
Import Duties	...	...	4,433,943	4,057,342
			<hr/>	<hr/>
			\$4,492,475	\$4,146,190
			<hr/>	<hr/>

The decline in revenue collected from export duties was occasioned by the decline in the value and amount of plantation rubber exported during the year.

Customs Tariff:

There was no change in the Customs Tariff in 1954.

Excise:

The only alcoholic beverage distilled in the State is Samsu and excise duty collected in 1954 amounted to \$36,523 as compared with \$41,591 in 1953.

Chapter VI.

(a) LAND UTILIZATION AND TENURE

Agricultural Land:

ANY person born in Brunei may acquire agricultural land in perpetuity. Others may acquire land with the approval of the State Council. Appendix "C" shows the various ways in which agricultural land applied for in 1954 is to be utilized but these figures are only an indication since there is a good deal of flexibility in practice. The figures in Appendix "C" do not take into consideration land utilized under various systems of customary land tenure, such areas are very extensive and in the main are used for raising stock and for planting hill padi.

The Land Code contains a utilization clause and land must be brought under cultivation within three years of alienation, in practice it is most difficult to ensure that land is in fact brought under cultivation within the prescribed period and in a great many cases land is acquired by speculators who only commence work on the land if and when they receive the six months notice to cultivate which the Land Code requires should be given to those who do not at once comply with the conditions covering alienation of land.

During the last three years land prices have appreciated considerably, particularly so in the vicinity of the larger towns. There are cases where land under poor quality seedling rubber has changed hands at \$15,000.00 per acre or more. The appreciation in the price of land has increased the demand for a secure title and applications for land have increased correspondingly, so much so that the Land Office has been unable to cope and the time lag between the submission of an application and the issue of a title has shown a tendency to lengthen. To cope with this situation increases in staff were authorised, the additional staff are undergoing training and the Lands Office should be shortly capable of handling a greater volume of work. The situation is nevertheless very far from satisfactory and it will probably

be at least two years before applications for land will be dealt with as expeditiously as is desired. Plans to reorganize the Land Office and Survey Department are being considered and some reorganization has in fact already been carried out, the issue of titles to land increased slightly in the last month of the year and there are signs that, in 1955, the numbers of titles which will be issued will show a very substantial increase indeed.

The great difficulty in recruiting officers with the necessary qualifications is however an almost insuperable obstacle to rapid improvement in the situation.

There is need for revision of the Land Code and it is hoped that a Bill will be introduced into the State Council in 1955, legislation is also required in order to permit land to be classified, at the moment there is no recognition in law of customary tenure although in fact, very large areas are utilized on this way. A Land Classification Enactment would permit of greater security of tenure being granted in those areas where the traditional methods of land utilization are based on extensive as distinct from intensive cultivation and should also do much to prevent inflation in land values and speculative dealings in land in areas where development is considered likely.

The improvement in communications is creating a greater demand for land in outlying areas but development has not been as rapid as would have been expected since many of the people living in rural areas have preferred to seek employment for wages rather than to devote their efforts to primary production.

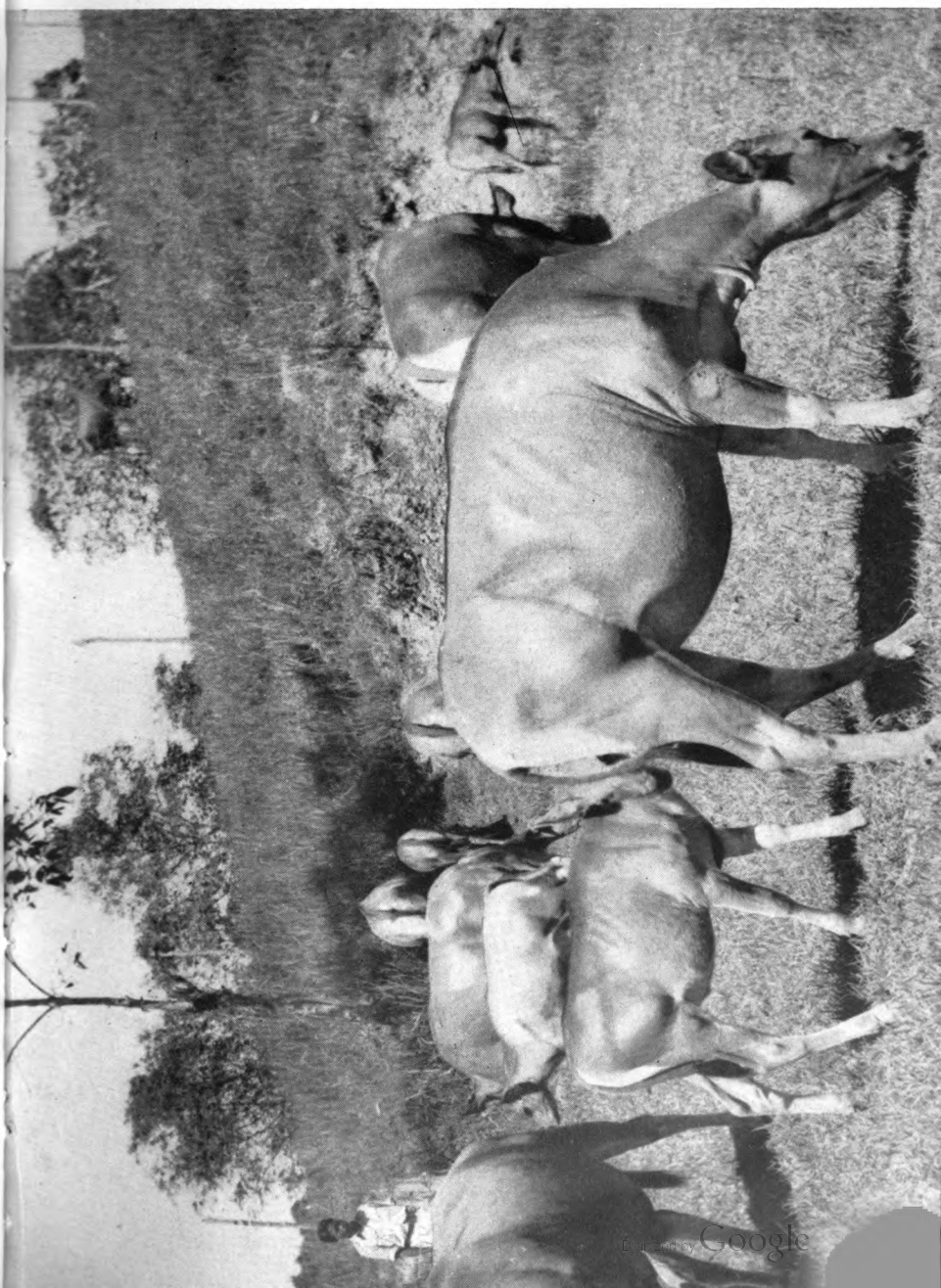
Land and Water Conservation and Utilization:

Road and River Reserves have been declared for all roads and navigable waterways. Grants issued subsequent to the Notification have made allowance for these but little progress has been made in carrying out mutation surveys in the case of titles issued prior to 1951. The work involved is enormous and the compensation payable amounts to a considerable sum.

Land Ownership:

The policy covering agricultural land has been detailed above. In the case of town land, there is considerable variation in the

Bali Cattle.



Padian (River)
Hawkers Brunei.



period of leases and in the quit rents payable. In some cases town land is held in perpetuity, whilst in others short term leases for as short a period as five years are given. Rentals and premia also vary within very wide limits and depend mainly on the purpose for which the land has been alienated.

A considerable proportion of the population live in houses built over the water, no title is issued in such cases and dispositions effecting the house site are not required to be registered. The system of tenure is based on age old custom—no transfer of a house can be made to any person not domiciled in the particular *Kampong* unless the other members of the *Kampong* agree, similarly no stranger may build in the *Kampong* area contrary to the wishes of the inhabitants, building sites are allocated by agreement and the right to each site is transmitted by inheritance, this right only continues, however, so long as the site is actually utilized, if abandoned the community resumes the right to allocate it anew.

(b) AGRICULTURE

Weather:

Rainfall in 1954 was heavier at all Stations than in 1953 and in general the latter part of the year was unusually wet. Floods occurred on several occasions in low lying areas but there was little damage to crops. The 1954 rainfall records and comparisons with previous year's records are shown in appendix "D".

CROP REPORTS

Rubber:

There was no recorded change in the acreage of rubber from last year's total of 30,575 acres although low prices for rubber and attraction of other work, such as in the oil fields and Development building programme, resulted in a further reduction in the acreage under tapping. There was little interest in new planting or re-planting during the year and it was decided not to issue any permits to plant pending supplies of budded stump planting material from the new nursery at Berakas Government Rubber Plantation.

At the Berakas Plantation, purchased towards the end of 1953, a 33 acre nursery was started in August with the object of producing budded stumps for sale to small holders. The seedlings established in 1952 will be ready for budding with TJ1 and PB86 (the two most suitable clones) in 1955.

There was a further decline in export of rubber sheet, only 882 tons being exported in 1954 compared with 1,169 tons in 1953. This was largely due to continued low prices in the early part of the year when the price of 1st grade sheet fell to approximately \$60.00 per picul—prices improved considerably towards the end of the year when approximately \$100 per picul was being offered.

There was no really serious outbreak of disease of rubber during the year; as usual, mouldy rot (*Certostomela fimbriata*) and termites (*Coptotermes curvignathus*) were recorded and advice on control was given.

Padi Season 1953/54:

The 1953/54 padi crop was not very successful largely due to reduction in acreage of dry padi and also to lack of rain in the main growing period which, in addition to lowering yields in general, also made the crop more prone to pests. Farmers who planted early had better yields on the average and escaped the worse effects of pests. The padi bugs *Leptocoriza* and *Scortinophora* were both quite common but the latter was easily checked by flooding where water control was possible. As will be seen from the table on page 35 total production of padi in 1953/54 was approximately 700,000 gantangs lower than in the previous year.

A summary of the district returns of estimated acreage and yields is given in the table on page 35.

Season 1954/1955:

The 1954/55 season started very well and conditions were very favourable for swamp padi. Hill padi too made good progress where a good burn was obtained but heavy rain interfered seriously with the clearing and burning operations in some areas. Planting of both hill and swamp padi was well up to schedule

District	Wet		Dry		Total	
	Acres	Gantangs	Acres	Gantangs	Acres	Gantangs
Brunei & Muara ...	1,851	534,670	995	141,531	2,846	676,201
Tutong ...	1,522	288,060	497	75,600	2,019	363,660
Kuala Belait ...	556	157,950	240	38,075	796	196,025
Temburong ...	649	824,400	479	90,805	1,128	915,205
Total ...	4,578	1,805,080	2,211	346,011	6,789	2,151,091

The following table shows the acreage yield in gantangs of padi for season 1953/54 as compared with the season 1952/53:—

District	Wet Padi Acreage	Approx. yield in Gantangs	Dry Padi Acreage	Approx. yield in Gantangs	Grand Acreage	Total Est. yield in Gantangs
1952 — 1953 ...	4,447	1,305,165	3,323	825,794	7,770	2,130,959
1953 — 1954 ...	4,578	1,805,080	2,211	346,011	6,789	2,151,091
Increase or Decrease	+ 131	+ 499,915	- 1,112	- 479,783	- 981	+ 20,132

and there was little trouble from *Scortinophora*. Excellent yields of swamp padi are expected in 1955, and hill padi crops will probably be slightly above average.

Swamp Padi Surveys:

During the year a team of Surveyors from the Consulting Engineering firm of Sir Bruce White, Wolfe Barry & Partners, began a survey of the drainage and irrigation potentialities of the Mulaut and Lumapas areas where it is hoped that considerable expansion of padi cultivation will be possible. In addition, this firm also commenced investigations in Great Britain into the production of new types of mechanical cultivation equipment for trial in the Mulaut area. These surveys and experiments form part of the Agricultural Development Plan for Brunei.

Sago:

No interest was shewn in sago planting during 1954 and the crop was, as before, largely confined to the Tutong and Belait river areas. No sago flour was manufactured, the production being entirely in the raw sago form and mainly consumed locally or exported to Sarawak for food 242 piculs were exported during the year. Estimated area under sago was approximately 2,500 acres.

Coconuts:

No new planting of coconuts was recorded, although there was some supplying of vacancies and the estimated area under Coconuts was approximately 1,648 acres. Imports of coconuts from Labuan continued to be on an appreciable scale. One large company applied for a loan to develop a 300 acres coconut plantation and a beef cattle herd on part of its existing rubber estate and this was approved--work is expected to start early in 1955.

Fruits:

The demand for supplies of fruit trees continued to increase and, in order to meet this, 5 new nurseries were established near the larger Kampongs. These nurseries were maintained by labour provided by the farmers themselves, supervision and budding

work being provided by the Department. Distribution of fruit trees from Kilanas station during 1954 was as follows:—

Rambutan (budded)	...	...	...	73
Rambutan (seedlings)	...	...	...	327
Pamello (marcotts)	...	...	...	31
Orange (marcotts)	...	...	...	109
Lime (marcotts)	...	...	...	18
Lemon (marcotts)	...	...	...	11
Pulasan (budded)	...	...	...	2
Pulasan (seedlings)	...	...	...	209
Duku (seedlings)	...	...	...	20
Jambu ayer (marcotts)	...	...	...	15
Durian (budded)	...	...	...	15

MARKET GARDENS

Supply of vegetables were still not plentiful during 1954 despite increased production in the Belait area, where newly opened land gradually replaced the land taken over by the oil company as mentioned in last year report. Further extension of vegetable growing took place in the Labi and Sungei Liang areas but the overall production of vegetables is still insufficient to meet demands. It seems probable that this situation will continue as long as so large a proportion of the population lives in the Brunei river Kampongs.

AGRICULTURAL & PADI TEST STATIONS

Agricultural Station, Kilanas:

Further development of the Kilanas Station took place during the year and a new granary and store building were nearing completion in December.

Apart from heavy losses in a consignment of day old chicks from Malaya (due to adverse weather conditions) poultry maintained a good health record and the new poultry area opened up last year was most useful. Ducks and geese continued to do very well and the few Turkeys introduced during the year also proved quite successful which is somewhat surprising considering how wet the season was.

The only other livestock being kept at Kilanas at present are the imported goats (Saanan) and cattle (Hereford & Illawarra) mentioned below under Animal Husbandry.

Several thousand rambutan seedlings were established in the nurseries, and towards the end of the year were ready for bud-grafting. The demand for these and other budded material continued to increase.

The new flower nursery was established in the old poultry area during the year. Various kinds of flowers—both perennials and annuals were planted and a permanent potting shed was constructed.

Kilanas Padi Test Plot—Season 1953-54:

A total of 20 acres of padi consisting of 15 varieties was grown at Kilanas during 1953/54 but a poor crop was harvested. The main cause of failure was drought and to a certain extent insect pests, particularly *Scortinophora*.

The second trial of planting two crops of padi a year was carried out soon after the last harvest and met the same fate as in 1952/54. The plants appeared to be healthy and vigorous, but in the end nothing was harvested, heads being empty due to attack of padi bugs and birds. This being the only padi growing at the time in the Kilanas area, it was very heavily attacked by all possible pests and, while it seems clear that two crops of padi could be grown, such a system is obviously impossible unless large areas can be cultivated.

Season 1954-55:

A total of 21 acres consisting of 15 varieties of padi was planted in 1954 and, in common with other wet padi crops in the State, shewed promise of an excellent yield. As in previous seasons cultivation trials were included in this programme, comparisons being made between buffalo trampling, tractor cultivation and "tajak".

Wet Padi Settlement Area, Mulaut:

Season 1953/54— The Government padi test and station plot was again only 24 acres in extent in the 1953/54 season the remaining 16 acres having been handed over to the settlement scheme in 1952.

The 1953/54 crops was not very successful, insect pest and drought being the main cause of failure. Soon after transplanting

the padi bug *Scortinophora* began to attack, but this was readily checked by flooding the area and applying a thin film of kerosene on the surface of the water. The padi bug *Leptocoriza* was in evidence during the flowering stage and caused considerable damage.

Season 1954/55— The area planted by the Department was again reduced to only 8 acres. The remainder being reserved for the experiments on mechanical cultivation of wet padi by the Consulting Engineers (Sir Bruce White, Wolfe Barry & Partners). The seedlings had a good start and a good crop can be expected in 1955 despite some early damage by rats.

Approximately two pounds of the dwarf "Engkatek" variety was received from Kuching for trial in this area.

Padi Test Plot, Lumapas:

Season 1953-54— Six acres of 16 varieties of padi were planted, slight damage being caused by insect pests and, to a certain extent drought. Damage by rats was practically negligible due to continuous setting of poison baits and a fairly good crop was harvested.

Season 1954-55— Conditions were favourable and work was well within schedule. The same 16 strains of padi were planted as in 1953-54 and crops appeared to be vigorous and healthy. Continuous heavy rainfall during the year caused some lodging but insect pests were negligible and a good harvest is expected in 1955.

Agricultural Station Birau:

The Birau Station was satisfactorily maintained in 1954 and continued to supply quite appreciable quantities of fruit and vegetables to the Nurses Hostel in Brunei. Sites were prepared for Junior staff quarters and Office and Store buildings and a labour line the latter being urgently required as the old one was blown down in a strong wind during the year.

The one acre padi demonstration plot was planted with two varieties of padi during the year, ploughing of the plot being carried out by means of a rotary hoe only. Seedlings were obtained from Kilanas station and the plot appeared to be quite

healthy and vigorous, except on a slightly higher portion where the soil is sandy.

A small observation on manuring of West African Cocoa was laid down—with no observable effect at the end of the year—and further improvements to the coffee and fruit plots were made.

Brunei Gardens:

A small ornamental garden was established near to the Istana during the year for supply of ornamental trees, shrubs and plants to public gardens and for sale in the Brunei area. Part of this area is being developed as a demonstration garden and the remainder consists of beds and potting sheds for multiplication of plants.

(c) *ANIMAL HUSBANDRY*

Animal Breeding Farm Jerudong:

Further progress was made with the development of this station. The cattle sheds, milking parlour and office cum store building were completed early in the year and, in addition to further clearing of scrub for extra pasture land, existing pastures were gradually fenced to permit closer control over grazing.

Shortly after the arrival of the Hereford and Illawara cattle mentioned in last year's report, a serious outbreak of Haemorrhagic Septicaemia occurred among them and of the total of seventeen animals received only seven survived despite urgent attention by the Veterinary Officer Sarawak. Arrangements have been made for regular immunisation of Government cattle and buffaloes against this disease which appears to be quite wide spread in the Brunei/Sarawak region. After this outbreak which occurred in January, the imported cattle were moved to Kilanas, together with Saanan Goats, and work at Jerudong was confined to local and Balinese cattle, buffaloes and local goats. Other cattle maintained an excellent health record and in particular the Balinese cattle (*Bos banteng*) imported last year have maintained very fine condition on extremely rough grazing, five calves of this breed were dropped during the year and the other cow was due to calve early in 1955.

Planted fodder grasses were not entirely successful partly due to excessive competition from lallang which infests the areas

most convenient for growing such crops. From observations made during the year it appear likely that Guatamala grass will form the main supply of cut fodder in the future—elephant (Napier) grass gave a very light crop and Guinea grass was even less productive. The latter may have a future as a grazing grass judging by small scale observations on close grazing started at the end of the year.

During the visit of the Veterinary Officer Sarawak in November, the opportunity was taken to review all male stock and a number of the less useful bulls and bull calves were castrated. At this time also plans were made for experimental paddocks to test the stock carrying capacity of various local and imported grasses and legumes and for management trials with local goats. Preparation for these trials was in hand at the end of the year. The private herd of cattle belonging to His Highness the Sultan continued to run at Jerudong and was under the general management of the Department, two good bulls were loaned to this herd and milk from the cows was sold with that produced by the Department herd, a total of 4,380 pints being produced from both herds in once a day milking. (calves allowed to suckle at night).

The small vegetable garden at Jerudong station was maintained and, in the same area, observation and stock plots of local grasses were established to provide planting material for future trial grazing paddocks.

Livestock at Other Stations:

Apart from the Animal Breeding Station at Jerudong, smaller number of livestock were kept at Birau (cattle and goats) and Lumapas (buffaloes for cultivation) while the main poultry activities continued to be based on Kilanas.

The Kilanas poultry flocks consisted mainly of imported hens of the R.I.R., Australop, Light Sussex, White Leghorn and Plymouth Rocks breeds although a few local hens were also kept. Flocks of Chinese geese, and of Muscovy and local (runner type) ducks were maintained at Kilanas also. Hatchability and incubator results were not particularly good and it is hoped that improvement will be obtained when a new incubator is obtained next year. The Saanan goats were transferred to Kilanas in June

and attempts were made to cross them with local goats late in the year but no crossbred kids have yet been dropped. The flock maintained reasonable health and increased from a total of six to eight during the year.

Local goats generally maintained a healthy record and after disposal of the older castrated billies, management trials are projected for 1955.

General Animal Husbandry in the State:

Buffaloes— There was a further increase in the buffalo population of the State and the records at 31st December, 1954, shewed a total of 11,517 head compared with 11,079 head at the end of 1953. A shipment of 100 breeding buffaloes from British North Borneo was arranged for farmers in the Temburong area but unfortunately sixteen of these animals died quite soon after arrival the cause of death being uncertain. No local buffaloes were affected and all the surviving imported animals were inoculated with Haemorrhagic Septicaemia vaccine and serum in case this disease was involved. Imports of buffaloes for slaughter from British North Borneo were resumed early in 1954 and a total of 886 were imported for that purpose (including imports from Sarawak). Apart from the outbreak of disease in Temburong mentioned above no major diseases of buffaloes were encountered.

Cattle— Further slight increase in the cattle population of Brunei was also recorded, the cattle population at 31st December, 1954 being 1,420 compared with 1,350 at 31st December 1953. Cattle are kept in small numbers throughout the State with rather heavier concentrations in the Tutong and Belait Districts where roadside and sea beach grazing are chiefly utilised.

Goats— Goats are widely kept in Kampongs and must contribute quite appreciably to the supplies of meat available to the population. No detailed census of goats is kept but the general impression gained is that they do very well and are not subject to any serious disease outbreaks.

Pigs— Three local pig keepers were in receipt of Government loans for the development of their businesses. In general pigs, which are kept by Chinese farmers only, are not very well managed; pig sties are usually of poor construction and feeding

is well below the standard required to rear pigs economically. The chief feeding stuff used is cooked sago pith which is very low in protein and the quantities of prawn refuse, local fish meal and bean cake fed are not sufficient to balance the diet. It is therefore not surprising that even the better piggeries take twelve to fourteen months to fatten a pig and arrangements were put in hand to make supplies of concentrate feeding stuffs available in 1955.

Poultry— Quite large number of poultry, principally hens, are kept in the kampongs with very little attention to feeding. Several outbreaks of Ranikhet disease were recorded despite the the Department's free vaccination programme which is, however, steadily gaining ground. A few farmers and salaried workers kept poultry on a larger scales and they made far more use of this immunisation service.

Agricultural Credit Schemes and Subsidies:

A total of eight loans for Agricultural purposes issued during the year or since late 1952 were still in operation. These were all for livestock keeping enterprises, three being for piggeries, three for cattle and goats, one for buffaloes and one for poultry rearing. In general they could be described as fairly successful except for those involving cattle which had made no progress due to the difficulty of obtaining foundation stock. The policy of sale of barbed wire at 50% of cost to control buffaloes and prevent them entering cultivated land was continued and 892 rolls of barbed wire were distributed.

In association with the Supply Department credit was advanced to Tua Kampongs for the purchase of surplus padi as in previous years.

Further progress was made with the resettlement scheme at Bunot where settlers are now quite well established. During the year further resettlement areas were surveyed, and partly developed, at Berakas estate and Jerudong Road, and the group farming area at Luahan (Jerudong road area) was partially planted up with coconuts.

Agricultural Show:

The Eighth Annual Brunei Agricultural Show was held on the 28th August, and was officially opened by His Highness the

Sultan. There was a large number of entries in most sections, particularly fruits and flowers. The Show coincided with the main fruit season and such fruits as rambutan, pulasan, durian and langsat were on display. Owing to the difficulties of transport, many farmers were reluctant to bring their animals for exhibition; however, some fine looking goats and a good number of poultry were exhibited. Cash prizes were awarded to winners of the various sections.

An exhibition of Silverware, brassware and Arts and Crafts in conjunction with the Commissioner General's prizes was also held. There was a good number of entries, and the exhibits were of excellent quality. The prizes for these were awarded by the Rt. Honourable Malcolm MacDonald. As in previous years a departmental stand was put up where exhibits of various kinds of crops were on show.

Visitors:

Notable visitors to stations of the Department of Agriculture during 1954 included His Highness the Sultan, His Excellency the High Commissioner, Sir Roland Robertson, M.P., Col. Philip Johnson, Mr. J. L. Greig (Director of Agriculture of North Borneo), Mr. R. W. R. Miller (Director of Agriculture, Sarawak), Mr. A. O. Merry (Veterinary Officer, Sarawak), Mr. O. F. Wright (Agricultural Officer, Sarawak), Mr. E. R. Bevington (Commissioner of Development), Mr. G. T. Myles (State Engineer) and Mr. B. A. Andrews (Pathologist).

Administration:

Inche Hamidoon ceased to officiate as State Agricultural Officer with effect from 3rd September, 1954, when he left for the United Kingdom on a short course in Agriculture in Devon. He was relieved by Mr. N. W. Smyth, Agricultural Officer, Sarawak, until the arrival of Mr. F. J. Harper, Deputy Director of Agriculture, Sarawak in November. Mr. Harper officiated as State Agricultural Officer throughout the remainder of the year.

The Senior Agricultural Subordinate Mohamed Hussain bin Abdul Hamid was promoted to the post of Agricultural Assistant with effect from 1st February, 1954.

The Superintendent of Animal Husbandry left the service at the end of June, and this vacancy has not yet been filled.

Two students were sent to the College of Agriculture, Malaya, to take the one year vernacular course. Four students returned from the Rubber Research Institute, Kuala Lumpur, after the completion of their training and were appointed as Rubber Instructors. Four other students returned from training at the Central Animal Husbandry Station Kluang, Johore and were appointed as Livestock Inspectors.

(d) FORESTRY

(Figures for 1953 are given in brackets after figures for 1954)

INTRODUCTION

Certain facts place the Brunei forest department in a unique position compared with others in the Commonwealth. These facts need to be emphasised because they are fundamental to an understanding of forestry in Brunei. They are—

- (i) Freedom from pressure on the land. Fifty thousand persons inhabit the 2,226 sq. miles of the State; 80% is under high forest.
- (ii) Freedom from pressure on the forest. The present cut is far below the potential cut on a sustained yield.
- (iii) Indifference to revenue. The State's revenues from the oil industry are sufficient for current expenditure and for development. The policy is therefore not to squeeze every cent out of the forests at the present time, as most States are compelled to do in order to balance their budgets, but rather to conserve and develop the forests against the day when the oil wells start to run dry.

1. CONSTITUTION OF FORESTS

The inventory of our forest resources, completed in 1953, gave the following areas—

<i>Total area of State</i>	<i>Forest Reserves</i>	<i>Stateland Forests</i>	<i>Secondary Forests</i>	<i>Agricul- tural and residential areas</i>
Sq. Miles 2226 %	938 42%	740 33%	456 21%	92 4%

Forest Reserves:

These are intended to be kept under high forest in perpetuity, and to form the permanent forest estate. The list of forest reserves is given in Appendix "F" and their position is shown on the map at the end of this report. The 27 acres excised from the Batu Apoi forest reserve comprise three rubber gardens, which were planted before the reserve was constituted and will now be leased to the owners. The second extension to the Anduki forest reserve, mentioned as 250 acres in the 1953 report, was finally constituted with a revised area of 360 acres; the opportunity was taken to re-survey and re-notify the boundaries of the whole reserve.

The programme of forest reservation is now complete.

State land forests:

These also belong to the Government but will gradually disappear as the land is alienated to the public for other purposes.

Secondary forests:

These consist of secondary growth, varying in age from 1 to 40 or 50 years, on land that has been cleared of its virgin forest for shifting dry padi cultivation. The land is still owned by the Government, but the person who originally clears the virgin forest has the right to cultivate dry padi on the land subsequently, under native customary law.

2. MANAGEMENT OF FORESTS

Maps:

No fresh slotted template plots (see 1953 report) became available during the year, but maps at photo scale (1 : 25,000) were prepared for the ulu Tutong and ulu Belait by the State Forest Officer, who toured up these rivers and plotted the position of nearly all the Iban settlements along them. As the only control points available are the primary Triangulation stations, these maps contain some local distortion, but previously no large scale map existed showing the run of the main rivers and their tributaries and the Iban settlements thereon.

Shifting cultivation:

This is a joint forestry/agricultural problem. A Government notice dated 10th May 1948 forbade the felling of high forest

or of secondary growth over 10 years old for dry padi cultivation. Dry padi cultivation on a 12-15 year bush fallow rotation is comparatively innocuous, but the reduction of the bush fallow period below 10 years is dangerous and liable to result in soil exhaustion. On 15th October 1954, therefore, a revised notice was issued, cancelling the notice of 1948 and merely forbidding the felling of virgin jungle (whether inside or outside a forest reserve) for dry padi cultivation.

Dry padi cultivation is practised by the Kedayans, Dusuns, and Ibans; the first two are indigenous, but the Ibans have come into Brunei from Sarawak during the past 50 years, and applications frequently come in from Ibans living in Sarawak, mainly in the Limbang, Baram, and Saribas districts, who wish to settle in Brunei. In November 1954, however, the State Council reaffirmed the policy it had laid down in 1948, that no further Ibans may be allowed to settle in the State (they may come in to work for a limited period, if sponsored by a Company).

Dr. J. D. Freeman's report to the Government of Sarawak on the social structure and agricultural methods of the Ibans stresses only too clearly the two fundamental characteristics of Iban agriculture:—

- (i) an insatiable appetite, if not a passion, for farming virgin forest;
- (ii) a thoroughly pernicious technique involving the cultivation of the same plot of land for two or even three years in succession, without the use of manure or fertilisers, resulting in the rapid exhaustion of the soil.

It would be disastrous for the natural resources of Brunei if Ibans were allowed to come in and practise their traditional methods of cultivation without any control.

Enumeration surveys:

The field party spent two months in the mangrove forests of the Selirong and Labu forest reserves sampling the growing stock by the "spot" method of enumeration. The data required for drafting a working plan for these forests is now almost complete, and it is hoped to complete the plan during 1955.

Management of State land forests:

As explained earlier, these forests will disappear in course of time and we are concerned only with reaping the existing crop in an orderly manner and not with future generations of trees. This is achieved by a system of licences; a tracing is attached to each licence showing the exact area to which it applies, and two licences are never issued for the same area; an up-to-date wall map is maintained in the office showing the distribution of all current licences.

Management of forest reserves:

There are no formal working plans as yet; exploitation is concentrated as far as possible in state land forests, and very little is being taken from forest reserves—except for the Anduki forest reserve, which has been worked intensively over the past 25 years, and will be worked out by the end of 1955. This reserve is worked on a minimum diameter system, with improvement fellings (using sodium arsenite) following extraction.

3. SILVICULTURE

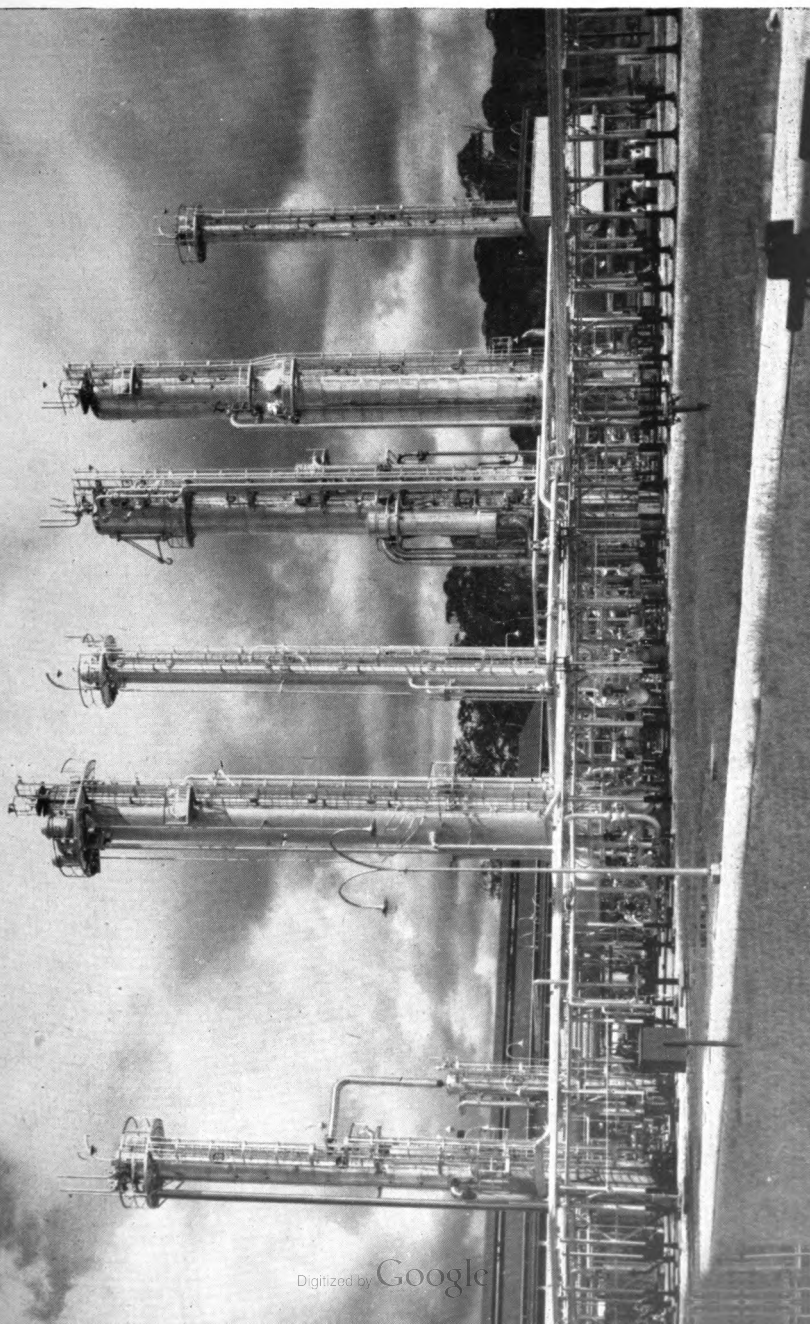
Silvicultural treatment after fellings is at present restricted to the Anduki forest reserve, where all unwanted trees are poisoned with sodium arsenite after extraction has been completed in a compartment. The field party spent some months on this work, but there are still some arrears to catch up. The Conservator of Forests, Sarawak, visited the forest and approved of the silvicultural methods used.

In the mangrove forests a change to an 8" minimum diameter system was made at the end of the year in the firewood export areas; this is the system favoured in the Fifth Division of Sarawak and in British North Borneo, and is considered to be better suited to the local conditions than the clear-felling system practised in Malaya and used hitherto in Brunei.

4. COMMUNICATIONS

It will be another three or four years yet before the \$15 million road development programme, approved by the State Council, has reached a stage where it will begin to assist the timber industry.

Part of new gas
processing plant at
Seria.



Part of the industrial area of
Seria oilfield.



Proposals for the improvement of the Belait and Tutong rivers—both important lines of communication in addition to being rafting streams—by the systematic removal of the innumerable snags, consisting of trees and parts of trees, were submitted to the Government during the year, and provision has been made in the 1955 development estimates for this project. The extensive forests in the upper reaches of these two rivers cannot be worked systematically until this clearing has been carried out.

5. PROTECTION OF FORESTS

Maintenance of boundaries:

The following work was carried out during the year—

Labi Hills forest reserve. Rentis cleaned and notice plates replaced from Bukit Puan to Bukit Teraja (from Bukit Puan to mile 7 the boundary follows the south side of the B.M.P. Co. road).

Ladan Hills forest reserve. South of Sg. Lengaban the boundary had not previously been demarcated on the ground. Following a preliminary inspection by the State Forest Officer, a party worked for a month cutting and surveying rentises from Sg. Kiulu to Sg. Belabau. Another month was spent in cleaning and re-surveying the rentises from mile 7 Kuala Abang road down to Sg. Beruang, and from mile 7 along the northern rentis for two miles.

Labu forest reserve. The Sarawak - Brunei boundary rentis from Bukit Sagan to Sg. Aru, part of which forms the eastern boundary of the Labu forest reserve, was cleaned by a forest party (the boundary was last cleared in 1932); it was found that a number of jelutong tappers from the Sarawak side had been tapping trees in Brunei territory.

Berakas forest reserve. Rentises were cleaned and notice plates replaced where necessary. The opening of the gravel quarry on the sea face in this area, and the construction of access roads, labourers' lines, etc. resulted in the destruction of a good deal of the forest during the year.

Forest Offences:

Agok anak Beranda, an Iban who move into the Labi Hills forest reserve about 10 years ago from the Baram district and has been squatting there illegally ever since, was prosecuted in the Belait district court for trespass and clearing forest for cultivation in a forest reserve without permission; he had three pre-

vious convictions for the same offence and had been sentenced to fines (twice) and imprisonment (once); this time he was sentenced to four months imprisonment and ordered by the Court to move out of the forest reserve. He has since done so. This case illustrates only too well the reluctance of Ibans to comply with the Forest Enactment, and the difficulty of controlling them, and hence the refusal of the State Council to allow any further Iban settlement.

In the Temburong district (Sg. Sibut area) an entire Iban house of 8 families felled virgin forest without permission, contrary to regulations, and was prosecuted in the Temburong district court. Fines of \$15 per family were imposed.

There were no other important cases during the year.

6. FOREST INDUSTRIES

The four main forest industries in the State are:—

- (i) the timber industry
- (ii) the firewood and charcoal industry
- (iii) the jelutong industry
- (iv) the minor forest products industry (rotans, leaf attaps, etc.)

Timber industry:

The industry concentrates on supplying the internal market, which is dominated by the 700 cubic tons per month (average) requirement of the B.M.P. Co., mostly in the Seria-Kuala Belait oilfield area. Government contractors also buy large quantities of timber for the numerous buildings under construction by the Public Works Department. The industry is unable to meet the full requirements of the market, largely for want of an adequate and reliable labour supply, and in consequence about 1/3 of the timber used is imported (chiefly from Sarawak).

Timber prices in the oilfield, which controls the market, remained much the same as last year:—

			\$ per cubic ton f.o.b.
Selangan batu	...	...	300 — 320
Semayor, kapur bukit	...	...	170 — 180
Kapur paya	...	...	110 — 140
Meranti	...	...	110 — 120
Sepetir	...	...	95

The price of kapur paya depends on the size of the timber; large sections such as 12" x 12" and 12" x 3" are produced cheaply by hand in Anduki forest reserve close to Seria, and are priced at \$110.00 per ton, whereas smaller sizes are cut in a sawmill and priced higher.

Sawmills:

No sawmill may be installed without a permit from the Forest Department; such permits are always linked with a licence for a suitable area of forest. There are 24 sawmills in the State, but many of these consist of a petrol engine (such as a Ford V8) or a light diesel engine driving a 48" bench, and move about periodically from one patch of State land to another.

All sawmills are powered by diesel or petrol engines, and all rely entirely on circular saws, both for breaking down logs and for re-sawing. None of them is either up-to-date in equipment or efficient in lay-out; the reason being that with inadequate labour to maintain a steady supply of logs and with inefficient labour in the mill itself there is nothing to be gained by investing a large amount of capital in an efficient mill.

Poles:

			<i>Outturn in cu. ft.</i>	<i>1953</i>
Mangrove poles	...	...	29,202	
Junglewood poles, taken by B.M.P. Co.	...	...	15,607	(47,123)
Junglewood poles (Misc.)	...	...	24,233	
			<hr/> 69,042	<hr/> (84,970)

The drop in the quantity of poles taken by the B.M.P. Co. is associated with a sharp falling off in the construction of temporary buildings. Most buildings in the oilfield are now of permanent construction.

Firewood:

(a) *Mangrove.* Production of mangrove firewood was 408,678 (480,734) cubic feet. Of this total 250,368 cubic feet was exported to Hong Kong by the George Ah Foott Firewood Co. or 11,518

(15,855) shipping tons, the drop being mainly due to a stock of 3,000 tons being carried over to 1955 because a ship could not be obtained to lift it.

A new development was the use of *nyireh bunga* firewood for firing the Soon Lee brick kilns at Sengkurong. This species is generally regarded as a weed in mangrove forests, growing hollow and crooked and being inferior to *bakau* as firewood, but it is suitable for firing kilns, both brick and charcoal. Its removal from the mangrove forests is therefore encouraged. However, for want of labour, not enough could be obtained to keep the brick kilns working to capacity during the year.

(b) *Other firewood.* Production of firewood other than mangrove totalled 48,484 (40,375) cubic feet; some of this was used for firing the brick kilns at Kampong Gana and Sengkurong.

Charcoal:

Last year 22 kilns were reported as built or under construction; by the end of this year 17 had been completed, but the remaining 5 have not yet been put in hand. Production for the year totalled 34,558 (23,813) pikuls. The market for charcoal is limited, and it is doubtful whether it will absorb much more than the present production, which goes mostly to coffee shops in the main towns. There is no export.

All the kilns are sited on Pulau Berbunut, and burn mangrove wood exclusively; *bakau* (*Rhizophora* sp.) is used for making the charcoal, but for firing the kilns other species can be used.

Jelutong:

Production of getah jelutong totalled 2,566 (1,419) pikuls. More than 1/5th of the total forest revenue is derived from this product, which is used in the manufacture of chewing gum.

Minor forest Produce:

Appendix "H" gives details of returns from minor forest produce.

7. IMPORTS AND EXPORTS

There was no export of timber during the year. Figures for exports of mangrove firewood and jelutong are given in previous paragraphs.

Imports:

(a) *Belian ataps (shingles)*: These are the traditional roofing material in Borneo, and are mostly obtained from Bintulu in Sarawak, but owing to dwindling supplies the Sarawak Government has prohibited export except (as a special concession) to the P.W.D. in Brunei for use on Government contracts. Imports totalled 167 (211) laksas (one laksa = 10,000 shingles), of which 105 came to Kuala Belait and 62 to Brunei.

(b) *Timber*: The B.M.P. Co. imported 2,616 (2,037) tons of timber to Kuala Belait during the year. Public Works Department contractors imported 97 tons from Singapore and 248 tons from Sarawak ports outside the Fifth Division. There is a 5% import duty on timber imported from Commonwealth countries, and a 20% import duty on other timber. Customs duties collected during the year totalled \$57,207. These figures were supplied by the Controller of Customs, Brunei.

Sarawak forest department statistics show that the export of timber from Sarawak Fifth Division ports (chiefly Lawas, to a small extent Limbang, Sundar, Trusan) totalled 144 (93) tons of round timber and 2,902 (2,568) tons of sawn timber during the year. Most of this was *kapur* and *sempilor* timber from the Tagai sawmill to the B.M.P. Co.

8. RESEARCH

A brief but profitable visit 21—28 July was paid to Brunei by Mr. J. Wyatt-Smith, forest botanist at the forest research institute, Kepong, Malaya. He was taken round by the State Forest Officer; two days were spent in the Andulau forest reserve and two days at Labu (Peradayan forest reserve) collecting specimens. Attention was focussed on the Dipterocarpaceae, which give us 90% or more of our commercial timbers. As a result of his tour to Sarawak, Brunei, and British North Borneo a revision of the Bornean dipterocarps is being undertaken in collaboration with Mr. G. H. S. Wood, forest botanist in Sandakan.

This family, which includes such well-known timbers as *sal* in India, *In-kanyin* or *gurjun* of Burma and Siam, *Selangan batu*, *kapur*, *keruing*, *meranti*, *resak*, etc., of Borneo is best developed in Brunei State, the Fifth Division of Sarawak, and the adjacent area of British North Borneo; here, so the botanists believe, may have been the cradle of the family from which it spread over south-

eastern Asia; nowhere else is the tropical forest so rich in variety of dipterocarp species.

Another interesting piece of research work during the year was carried out in June by Mr. J. A. R. Anderson of Sarawak forest department in the deep peat-swamp behind Seria. The method adopted was to cut a 6-mile rentis through the *seringawan* forest west of the Badas railway across the heart of the bog, enumerating all trees $\frac{1}{2}$ chain each side of the rentis down to 12" girth, and closing the book every 5 chains. Botanical specimens were collected of unknown species. From seismic records of the B.M.P. Co. we have some data on levels and depths of peat across the bog (the peat is 25-30 feet deep over most of the area). The results of this work will probably be included in a thesis on peat swamp-forest that Mr. Anderson hopes to complete before the end of 1955. In the world literature very little has been recorded so far on the ecology of these forests, which cover several thousand square miles in Sarawak and Brunei.

9. EDUCATION

As usual, Brunei sent one student to the Forest School for the one year vernacular course. Forest Guard Hussein was placed 59 out of 60 in the final examination, failing in 3 out of 8 subjects.

10. FINANCIAL RESULTS

A summary of revenue and expenditure for the year is given below:—

Year	Revenue	Expenditure			Surplus
		Personal Emoluments	Other Charges	Total	
1954	128,633	61,498	38,352	99,850	28,783
1953	116,760	62,021	23,125	85,146	31,614

Details of revenue from different classes of forest produce are given below:—

Kind of Produce		Revenue 1954	Revenue 1953	Increase or Decrease
Timber and poles	...	82,564	74,027	+ 8,537
Firewood and charcoal	...	15,504	20,820	- 5,316
Minor forest produce	...	30,349	21,793	+ 8,556
Miscellaneous	...	111	105	+ 6
Compensation and fines	...	105	15	+ 90
		128,633	116,760	+ 11,873

The drop in firewood and charcoal is due to the drop in exports to Hong Kong. The increase in Minor Forest Produce is due to the increased production of getah jelutong.

11. ADMINISTRATION AND GENERAL

Mr. B. E. Smythies, Assistant Conservator of Forests, held the post of State Forest Officer throughout the year, in addition to the post of Section Forest Officer, Limbang and Lawas sector, Sarawak.

The staff of the department at the end of the year consisted of:—

- 1 State Forest Officer
- 1 Chief Clerk
- 3 Assistant Clerks (Brunei, Tutong, Kuala Belait)
- 3 Forest Rangers (Brunei, Tutong, Kuala Belait)
- 6 Foresters
- 12 Forest Guards
- 7 Forest Labourers
- 1 Driver/boatman
- 1 Draughtsman
- 1 Office Peon.

The forest labourers, as in Malaya, are monthly-paid non-establishment personnel; vacancies of forest guard are normally filled from their ranks.

After 21 years in Kuala Belait, the office of the State Forest Officer moved to Brunei on 1st April, and now occupies two rooms in the new Government offices.

(e) FISHERIES

The principal fishing areas of the State of Brunei are mostly coastal and the industry depends almost wholly on inshore grounds in the vicinity of river mouths and estuaries or near coral beds and rocky patches.

The "Tugu" industry, a characteristic type of prawn fishing using conical nets (Tugu) set in long rows across the flow of the tide, is centered around the southern part of Brunei Bay and has its headquarters on the two small Islands of Baru Baru and Ber-bunot. In this area, sets of Tugu nets can be seen extending from

the Southern shores practically right across the bay and leaving clear only the navigable channels of Brunei, Limbang, Temburong and Pandaruan Rivers.

River fisheries are rather primitive and consist of a small number of fish weirs (Kilongs) and traps (Bubus) with the occasional use of a short line from which baited hooks are suspended. Returns from river fisheries, however, are so small as to be negligible and in the main they are operated for the personal consumption of the owners.

All fisheries in the State of Brunei are seasonal and methods and gears vary accordingly. Tables below show the various gears for which licences were issued during the year. Figures for the previous year are also given for comparison:—

<i>Gear</i>			1953	1954	<i>Explanation</i>
Pukat	...	...	24	17	Small drift net
Rantau	...	...	14	3	Large drift net
Kilong	...	...	107	31	Deep water fishing trap
Paguyot	...	...	3	4	Drag net
Kabat	...	...	24	25	Small fish trap
Bubu	...	...	55	265	Similar to lobster pot
Tambak	...	...	10	20	Set net
Lintau	...	...	58	118	Shoal water fish trap
Slambau	...	...	3	18	Watched set net
Penakat	...	...	40	32	Line fishing
Rambat	...	...	7	8	Cast net
Gurit	...	...	10	1	Long line
Anchau	...	...	—	3	Similar to drag net

These tables are for the whole State, but a breakdown of gears and boat licences shows the Brunei Town Area possess the largest fishing community:—

		<i>Gear Licences</i>		<i>Boat Licences</i>	
		1953	1954	1953	1954
Brunei Town	...	93	83	92	59
Baru Baru	...	75	20	44	20
Kuala Belait	...	69	101	22	—
Tutong	...	19	160	19	21
Kuala Labu	...	69	80	76	71
Muara	...	71	63	32	39
Total		396	507	285	210

Total landing of fish and prawns during the year are as follows:—

QUALITY

	<i>Fish No. 1</i>		<i>Fish No. 2</i>		<i>Fish No. 3</i>		<i>Prawns</i>		<i>Grand Total</i>	
	<i>Pls.</i>	<i>Ktts.</i>	<i>Pls.</i>	<i>Ktts.</i>	<i>Pls.</i>	<i>Ktts.</i>	<i>Pls.</i>	<i>Ktts.</i>	<i>Pls.</i>	<i>Ktts.</i>
Brunei Town	195	—	1438	88	2440	60	837	29	4911	77
Seria	692	59	541	44	386	67	48	22	1668	92
Kuala Belait	414	47	544	81	552	72	35	94	1547	94
Tutong	30	—	40	—	50	—	—	—	120	—

These figures show a considerable increase on those for the previous year:—

				1953	1954
Fish (all grades)	...	...		2,264.45	3,429.99
Prawns	...	...		589.38	921.45

The year 1954, however, was an unusually good one for the fishermen, an abundance of fish and prawns being caught each season. It is therefore, difficult to ascertain what percentage of this increase is attributable to the 'mechanization' of the fishermen under the Government scheme of financial assistance, given on security to enable the fishermen to purchase outboard engines and better craft, and another year must lapse before a true idea can be obtained.

The exact total weight of prawns landed in Baru Baru and Berbunot is unfortunately not available, as a considerable quantity has, in previous years, been sun-dried and powdered on these two Islands. This commodity is then exported as 'prawn dust'.

With the exception of 'prawn dust', all fish and prawns landed in Brunei are for consumption within the State and there is no other export of these commodities.

The State of Brunei does not have a Fisheries Department. The Marine Officer is responsible for the control and supervision of the Industry, the Headman of each individual fishing community assisting this officer wherever possible.

Marketing is in the hands of a limited number of licensed Towkays (merchants). Controls are exercised over movement of fish and prawns within the State, and in the Brunei Town area, a price control is enforced. The 'Towkay' system largely finances

the fishing industry in Brunei. The fisherman obtains the necessary gear and boats, and in some cases even food, from the Chinese Towkay, and is thereafter considered to be under 'contract' to hand over to the Towkay all the fish he catches. This is not a really satisfactory system and is open to abuse, for very often the initial debt is out of proportion to the fisherman's earnings and is carried on indefinitely. It is, however, of advantage to the fisherman during the monsoon seasons when for days on end he may be weather bound and unable to put to sea.

(f) MINING

Production of light and heavy crude oil from Seria field by The British Malayan Petroleum Company Limited averaged just over 98,000 barrels per day during 1954, amounting for the year to a total of about four and three-quarter million tons.

This compared with an output during 1953 of about 100,000 barrels per day.

The slight drop in output was mainly the result of a planned retardation of the rate of production of certain wells designed to conserve to the fullest degree the life of the field and to ensure maximum total recovery of oil. Conservation of resources and their most economical rate of production continued during 1954 to engage the attention of specialists on the B.M.P. Company's staff, since the wise husbanding of resources is playing an increasing part in the policy of oil companies the world over.

During 1954, 28 new wells were completed in Seria field, involving the drilling of 168,000 feet of hole. Twenty-seven of the wells were oil producers and the 28th was a gas well. Seventeen of the wells were "deviated"—that is to say, the holes were angled away from the vertical to reach bottom at points often a considerable distance from the spot they would have reached had the shaft been straight. This technique is employed particularly in cases where it is desired to drill a well on land, yet reach oil deposits under the bed of the sea.

The oil produced at Seria is of two main types: a light, waxy oil of specific gravity 0.83, and a heavy, non-waxy oil of 0.95 specific gravity.

Geological and other exploration work went on throughout the year, and exploration drilling continued in the Labi area of Brunei. Towards the end of 1954 preparations were put in hand for the drilling of an exploration well at Jerudong, between Tutong and Brunei Town, in an area where a certain amount of drilling took place in the late 30's. Actual drilling on the Jerudong site is expected to begin in mid-1955.

Work was successfully completed during 1954 on the drilling of four wells into the bed of the South China Sea from a drilling platform erected during 1953 about a mile offshore at Seria. The wells, drilled from the four corners of the platform, were brought into production towards the end of the year. The erection of another two marine drilling platforms began during 1954, and by year's end was in an advanced state. One of these platforms stands in the sea roughly offshore from Seria bazaar, and the other is near Anduki airfield. Both will be served by aerial ropeways for the transport of men and equipment, as in the case of the first marine platform.

At December 31, 1954, The British Malayan Petroleum Company had on its books in Seria, Kuala Belait and Brunei outstations the following employees (excluding those on home leave):

Senior Staff (all races):	...	...	320
Regional Staff (all races):	...	...	907
Labour Force:	...	...	5,599

In addition, 104 Europeans were working in the Seria and Kuala Belait area for firms directly contracted to the oil company for various technical and other services.

The year 1954 in the oilfield was, in general, one of transition and consolidation. The oilfield may be said to have passed in a planned and orderly manner out of the "rush" period which followed the end of the war, when the Commonwealth's urgent demand for non-dollar oil supplies made it necessary to accelerate production at the expense of many other forms of activity.

The programme for re-building temporary houses for workers and staff continued unabated, and in addition many new permanent houses were erected for extra staff. The whole oilfield area was the scene of a sustained clean-up drive which rid it of much debris and other rubbish accumulated during the occupation and afterwards.

Considerable work and money was expended on the improvement of roads and drainage, and a notable undertaking which began in 1954 was the construction of a six-and-a-half mile dyke to preserve the oilfield's coastline from erosion by the sea. About $1\frac{1}{2}$ miles of this dyke had been completed by the end of the year, in time for a severe testing by "King Tides" and rough seas in December. Although the dyke was slightly damaged (mainly by the battering it sustained from sea-borne logs), it perfectly fulfilled its function of preventing ingress by the sea into low-lying oilfield areas, and the damage of coastal installations.

Special attention was paid during the year to a campaign for greater freedom from industrial and road accidents in the oilfield. Vigorous prosecution of this campaign resulted in the reduction of road accidents over the year by about 100, and in approximately halving the severity rate for industrial accidents. The improvement in both these directions would probably be even more marked, were it not for the fact that one of the ingredients of the accident prevention campaign was an insistence that *all* accidents, however slight, be reported upon in greater detail than ever before.

The B. M. P. Company continued to operate its own aviation service, which during 1954 carried approximately 13,700 passengers and 1,300 tons of cargo and passengers, chiefly between Seria and Labuan, the nearest commercial airline and shipping terminal. Anduki, the B. M. P. Company's airfield at Seria, was re-drained during 1954, and additional hanger and passenger-handling accommodation was added. The Company placed this airfield at the disposal of Sabah Airways Limited for use by the D. H. Rapide aircraft which late in the year started the Miri-Anduki-Brunei-Labuan, and return, feeder service. The Company's extensive land and sea transport organisations also continued to work at high pressure, handling up to 12,000 tons per month of oilfield cargo.

The welfare of its employees has always been a point of major concern for The B. M. P. Company, and this policy continued to receive implementation during 1954. Facilities for sport, children's playgrounds, and adult education continued to be expanded during the year, and the Company Management maintained its close interest in the club and other social facilities provided for workers and staff.

His Highness the Sultan declared open a new Mosque built by the Company at Seria, a gift from the Company to the local Muslim community to mark His Highness's coronation, and other major building projects completed during year included a permanent new cinema (officially opened on January 9, 1955), a Community Hall to house social and educational events staged by the oilfield's various communities, and an extension to the Company's Trades School.

The entry of Government-nominated trainees at this School was a significant development during the year: 27 Government nominees are now under training there in addition to 120 Company trainees, and it is planned to add 25 from Government sources each succeeding year until a total of 75 is reached. It is hoped that the sound technical education they receive will fit them to play a part in the State's Development Plan, which will call for the addition of many technicians to Government Departments.

Major development projects started in the oilfield during 1954, and far advanced towards completion by the end of the year, included: a new commissariat, for the storage and sale of cold-storage and other foodstuffs to oilfield families; a new power station with an initial generating capacity of 6,000 k.w.; a new transit hotel for senior staff; a water-filtration plant (which will also serve Government consumers in the Seria and Kuala Belait bazaar areas); and a new communications centre to house the oilfield's automatic telephone, radio telephone and wireless telegraphy equipment at one central site.

The year saw also the going "on stream" of a large gas processing plant (which had not been officially opened by the end of the year). The plant, which represents the first introduction of refining processes into the State, has circulated through it all the waste gas produced by the oilfield's wells. From this gas the plant extracts about 150 tons per day of high-grade natural gasoline, which is sent by special pipeline to Lutong Refinery for the enrichment of products distilled there from Seria crude oil. The plant exercises the additional function of refining a small amount of Seria crude oil, to supply not only the Company's diesel fuel and gasoline requirements but also those of the public in the Kuala Belait-Seria area.

The foregoing account of activities in the oilfield does not take into account the large amount of routine maintenance work carried out at all its installations and buildings: such work had advanced by the end of the year to a point at which Seria might well lay claim to being a model of complex industrial planning, unique not only in Borneo but over a large area of the world.

Chapter VII.

SOCIAL SERVICES

(a) EDUCATION

IT is encouraging to record that 1954 has been a truly historic year for education in Brunei. By the middle of the year a Proposed Development Plan for Education covering 5-6 years was published and later at various stages approved in principle by the State Council. This report is divided into two parts (I) The Work of the Education Department during 1954 (II) The progress of the Development Plan (1954-60).

(I) THE EDUCATION DEPARTMENT DURING 1954:

For the first time over 7,000 children have been enrolled in various types of schools, the biggest increase being in Malay Vernacular Schools. More than thirteen hundred additional children have attended school this year than in 1953.

It is most heartening to note that the call to send their daughters to school is being answered by more and more parents. Every form of propaganda has been used throughout the year to solve the serious problem of the education of women and girls in Brunei. Although there was an increase of 200 girls in Malay Schools this year there are still more than three times as many boys as girls in these schools. It is the policy of the Department to segregate the girls from the boys where numbers warrant separate divisions. As the number of women teachers increase there is no doubt that the number of girls pupils will increase. It is confidently anticipated that between 80% and 90% of the boys are already in schools. On the other hand only some 30% of girls are receiving some form of Education. Detailed figures in each category are included in this report.

Malay Vernacular Schools — Government:

Two new Malay Schools were started this year at Kupang and Bunut and one Iban School at Kenua. Six more temporary Kajang school buildings were erected by villagers towards the

end of the year in preparation for the new school year of 1955. They were sited at Sukang, Birau, Layong, Rambai, Masin and Pangkalan Batu. All were assisted by a Government grant to each school of \$400.00 to help the Kampong people to purchase the necessary materials, the labour being provided free by the people. It is confidently anticipated that all these schools will be replaced by permanent buildings under the Development Plan.

Three schools were provided with permanent school buildings (additions) — Sengkurong, Kilanas and Baru-Baru whilst ten Teachers' Quarters were built in various districts. The housing of teachers is a very acute problem in restricted Urban Areas. The only solution appears to be the erection of Flats. An experiment of a block of flats will be made next year. \$331,335.00 was spent on Malay School Buildings, Teachers' Quarters and Equipment during the year. Of this total over \$25,000.00 was spent in the provision and levelling of playgrounds, the largest expenditure being at the Sultan Mohamed Jamalul Alam Malay School, Brunei Town. When all earthworks are completed at this school the result will set a high standard of recreation space and landscape gardening.

Parents' Day or Hari Ibu Bapa is an annual feature in all these schools. Collections are made by the Kampong People to provide prizes for the children's Handwork, and Schoolwork. Gardening and Physical Training Displays are rounded off by athletic sports and speeches. \$7,832.56 was collected this year. Government will match these contributions by a grant-in-aid to each school next year. Headmasters and Teachers deserve the highest credit for the amount of work and general organisation which goes into these happy gatherings of parents and pupils. For many years now the Malay School Gardens have been a source of pride to all concerned. The majority of school-children arrive at school before 7.00 a.m. and do an hour's work in the garden or school padang supervised by keen teachers. \$1,409.63 was collected from the sale of vegetables and fruits this year.

Football is the favourite game of all Malay boys. A most successful schoolboys' competition was held this year, the final being won by the Government English School Seria. Physical Training Competitions were again held in all Urban Areas with

practically every school sending a representative team. The final placings given by the judges were:—

(a) Sultan Mohamed Jamalul Alam Malay School, Brunei Town—Team C.

(b) Malay School, Kuala Belait.

Prizes and medals were awarded by the Department.

The demand from parents for their children to be taught English as a second language is gathering momentum. Although over 150 Malay children were admitted to the two Government English Schools at the end of the year (after an entrance examination conducted by Expatriate Officers), there is much heart-burning and genuine disappointment from those whose children fail to gain entry. The teaching of English in Malay Schools is the biggest problem to be solved. At the moment there are only some two dozen teachers capable of teaching even the most simple English. It is hoped to recruit during 1955 a number of itinerant English Teachers who will organise and train Malay Teachers capable of effectively teaching English. The Kirby Scheme outlined in the Development Plan will do much to solve this problem but it will take several years before the teaching of English can be really effective as a second language in these schools.

The number of children staying on to Primary V and VI is growing each year and at the moment is the only recruiting ground for Probationary Teachers. As the Development Plan takes more and more effect the ground for recruitment for prospective teachers and Government employees will pass on to the Secondary Schools. With the exception of the paucity of English the general curriculum of Malay Schools is well balanced. Besides the general school subjects very real emphasis is placed on school gardening, local handicrafts, physical training games and athletics. The standard of the teaching of Malay may not be as high as desired, being so vital in a Malay State. Steps have already been taken to improve the study of Higher Malay and Literature in the Government Secondary Schools. Religious Instruction continued to be given by Religious Teachers from the Department of Religious Affairs.

TOTAL SCHOOL ENROLMENT 1954

Schools	1953			1954			Increase	
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls
Malay (35) ...	2,143	536	2,679	2,462	713	3,175	319	177
Chinese (7) ...	1,058	669	1,727	1,275	875	2,150	217	206
Mission English (4)+	854	523	1,377	974	634	1,608	120	111
Govt. English (2) ...	113	21	134	208	40	248	95	19
Totals ...	4,168	1,749	5,917	4,919	2,262	7,181	751	513

Secondary Total 167 63 230

Primary Total 4,752 2,199 6,951

+ Includes Panaga School.

Analysis School Enrolments — 1954 — Racial — All Schools.

<i>Race</i>				<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Malay	...	...	...	2,139	589	2,728
Chinese	...	...	...	1,907	1,293	3,200
Kedayan	...	...	...	440	130	570
Indian	...	...	...	76	63	139
Dusun	...	...	...	147	17	164
Eurasian	...	...	...	46	44	90
Iban/Dayak	...	...	...	70	26	96
European	...	...	...	77	76	153
Others	...	...	...	17	24	41
Totals				4,919	2,262	7,181

Racial Analysis — Government Malay Vernacular Schools 1954.

<i>Race</i>				<i>Boys</i>	<i>Girls</i>	<i>Total</i>
Malay	...	...	...	1,821	505	2,326
Kedayan	...	...	...	440	130	570
Dusun	...	...	...	139	56	195
Chinese	...	...	...	32	19	51
Iban	...	...	...	21	3	24
Others	...	...	...	9	—	9
Total			...	2,462	713	3,175

Teachers Training (Malay):

General teacher-training schemes are included in the Development Plan report. There is no difficulty in obtaining recruits for the Batu Lintang Training Course but it will be difficult to find sufficient girls for the Kent College Course starting next year. However, as the Secondary Education of Girls develops the field of recruitment will widen. At the present all our Probationer Teachers are handicapped with their extremely poor knowledge of English. The teaching of English is now being stepped up in Probationer Training Centres. Many Probationers are now attending Evening Classes.

Comparative Tables are given below:

	1953	1954
1. Trained Teachers (men)		
(a) Sultan Idris Training College, Malaya	27	28
(b) Batu Lintang Training Centre, Kuching	31	43
2. Trained Teachers (women)		
Malay Women's Training College, Malacca	3	4
3. Untrained Teachers		
(a) Men	22	27
(b) Women	4	4
4. Probationers		
(a) Men	51	74
(b) Women	5	8
5. Temporary Teachers		
Men	14	—
Total ...	157	188

NUMBER OF TEACHERS UNDERGOING TRAINING OVERSEAS — 1954

1. Sultan Idris Training College, Malaya	2
2. Malay Women's Training College, Malacca	2
3. Batu Lintang Training Centre, Kuching	30
Total	34

Chinese Schools:

Although numbers continue to rise, the problem of finding sufficient capital to build modern schools in keeping with development is still a major problem of all Chinese School Committees.

Commendable efforts have been made to improve buildings at Brunei Town, Labi and Kuala Belait Chinese Schools. Most of the teaching staffs have to be recruited from neighbouring territories but owing to the low salaries offered, poor accommodation for teachers and lack of security the staffs are constantly changing and there is a general feeling of unrest. Constantly changing staffs usually means a lack of discipline with pupils. Although the Government grant-in-aid was considerably increased this year it is still difficult to recruit the right type of teachers who are capable of teaching both English and Chinese. Chinese School Committees have carried on through the year surrounded by many difficulties but nevertheless two schools have made a start with Junior Middle Courses. It is hoped to recruit an Inspector of Chinese Schools early next year.

Secondary Education (English):

This year might well be noted as Brunei's real start of Junior Secondary Education. With the arrival of six expatriate officers from the United Kingdom considerable reorganisation has been effected in both Government English Schools and 1955 will be the first time Brunei has produced its own candidates for an external Junior Secondary Examination (Form III). As the new permanent buildings materialise it will be possible to give each pupil a modern secondary education with separate streams taking one of the following courses (a) Commercial, (b) Pre-Technical, (c) Pre-Agricultural — Rural Science, (d) Advanced studies in Malay, (e) one stream proceeding to the Cambridge External Examinations leading to University Degrees and Diplomas. The recruitment of qualified Regional Teachers on contract is better than last year and no serious staffing difficulties are anticipated in 1955. The real difficulty is finding housing accommodation for officers on contract under the Development Plan.

The Roman Catholic Mission School at Seria has improved the quality of its Teaching Staff during the year besides starting to build a large school in preparation for next year. The co-operation of this Mission with the Education Department has been most commendable. An Advisory School Board for Catholic Schools has been initiated with the State Education Officer as an ex-officio member.

The British Malayan Petroleum Company has awarded to date a total of some 32 scholarships to the children of their employees (to the value of \$500 for each scholarship) tenable at any recognised Secondary School. The bulk of these scholarship winners have gone overseas for their education. A problem has now arisen of finding sufficient places in overseas Secondary Schools for both private and scholarship students. Comparative tables follow.

Vocational Training — B.M.P. Company Apprentices — Trade School Seria — 1954.

<i>Race</i>	<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>	<i>Total</i>
Malay +	35	5	6	46
Chinese	31	15	19	65
Dayaks	4	6	1	11
Milanau	5	—	—	5
Indian	1	2	—	3
Dusun	1	—	—	1
Totals ...	77	28	26	131

+ Includes 25 Malays from Brunei Government Development Plan (Education).

Adult Education.

<i>Evening Institute</i>	<i>English</i>		<i>Typewriting</i>		<i>Total</i>	
	<i>M.</i>	<i>W.</i>	<i>M.</i>	<i>W.</i>	<i>M.</i>	<i>W.</i>
Brunei Town—Government ...	102	5	19	1	121	6
Seria—Government ...	74	—	—	—	74	—
Kuala Belait—Government ...	37	4	—	—	37	4
B.M.P. Company—Seria	83	—	—	—	83	—
Chung Hwa — Brunei Town + ...	16	—	—	—	16	—
Totals ...	312	9	19	1	331	10

+ Chinese Subjects only.

Total Enrolment 1954 — 341.

SECONDARY EDUCATION 1954

<i>English Secondary Schools</i>	<i>Form I</i>		<i>Form II</i>		<i>Form III</i>		<i>Form IV</i>		<i>Form V</i>		<i>Total</i>	
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.
Government English School, Brunei Town	30	10	12	4	—	—	—	—	—	—	42	14
Government English School, Seria ...	12	4	13	3	—	—	—	—	—	—	25	7
Catholic English School, Seria ...	27	15	18	7	5	4	—	—	—	—	50	26
Regional Overseas Scholarships Government	—	—	2	—	5	—	2	—	2	—	11	—
Totals 1954 ...	69	29	45	14	10	4	2	—	2	—	128	47
First Year												
+ Chinese Junior Middle	B.	G.										
Chung Hwa School, Brunei Town ...	34	14										
Chung Ching School, Seria	15	2										
Totals 1954 ...	39	16										
											Totals ...	167 63

Total English and Chinese Secondary Education — 230.

+ Commenced January, 1954.

Medical Attention in Schools:

There was a considerable increase of medical attention during 1954 in all types of schools. Preliminary stages were investigated prior to launching schemes in 1955 regarding Defective Vision and a B.C.G., campaign. During the year a Dental Officer began a limited amount of work with 1893 patients. Six thousand seven hundred and thirty-five children were inoculated with T.A.B. Injections.

A start was made in constructing Bore-hole latrines for Rural Schools. Thirty-six were constructed, forming part of the Development Plan. Areas suitable for this type of latrine are limited as the majority of schools are situated where the water table is high. All pupils admitted to Government English Schools and students proceeding to Teacher Training Centres and B.M.P. Company's Trade School were medically examined prior to admission.

School Feeding:

Very big strides were made by the Medical Department in co-operation with School Authorities in extending the Free School Meals service. Some \$600,000 has been spent in providing a balanced meal for 4,539 school children for six days every week of School Terms. By the end of the year 40 schools were participating in the scheme although several large schools remained to be organised later. Large urban schools present a special problem where large dining accommodation and special cooking facilities are so vital to the success of the scheme. All new schools in the Development Plan will have adequate dining accommodation and kitchens provided.

The guidance and organisation of this School Feeding Scheme by the Medical Department deserves special praise. The Teachers have co-operated well and have given both their service and time ungrudgingly for the welfare of all children participating in this Development Plan Scheme.

The Development Plan:

Early July, the State Education Officer, following consultations with the British Resident, the Director of Education, Sarawak, the former State Education Officer and the Superintendent of

Malay Education submitted detailed proposals to Government. The Proposals were printed in both English and Malay together with a financial summary.

Following deliberations with the State Development Committee the following Schemes were authorised by the State Council:

April 21st 1954

1. Kirby Teachers' Training Scheme ...	\$ 150,000
2. Trade School Scheme for Brunei Boys ...	1,000,000

July 5th 1954

3. School Buildings—Primary (including equipment)	2,000,000
4. Teachers' Quarters—Primary (including furniture)	2,500,000
5. School Buildings—Secondary (including equipment)	4,000,000
6. Teachers' Quarters—Secondary (including furniture)	500,000
7. Building Grants to Mission and Chinese Schools	500,000
	<hr/>
	\$10,650,000
	<hr/>

At the end of the year the following additions were included in the State Estimates for 1955:—

1. College Training for Teachers	\$ 100,000
2. Pupils Teachers' Training	15,000
3. Overseas Scholarships	35,000
4. Educational Visits to the United Kingdom	40,000
5. Local Scholarships	20,000
6. Hostel Accommodation	80,000
7. Expatriate Staff from United Kingdom	100,000
8. Regional English Teachers	100,000
9. Adult Education	30,000
10. School Textbooks, Visual and Aural Aids, Physical Training Games	25,000
11. School Libraries	12,500
12. Production of Vernacular Literature	20,000
	<hr/>
	\$ 577,500
	<hr/>

ADDITIONAL TO THE DEVELOPMENT SCHEMES ALREADY APPROVED

All schemes outlined in the Development Plan have been approved in principle by the State Council. Following the Woodhead Commission, schemes may be modified or extended in the light of the Woodhead proposals. An Advisory Education Committee will be established in 1955. Financial assistance to approved Mission English Schools and Chinese Schools in accordance with agreements to be settled between these bodies and Government will be one of the first problems to be debated by the proposed Advisory Committee.

The following data outlines the progress of education development schemes during 1954. Approximate total Expenditure being as follows:

(a) Part I Estimates	...	...	\$ 774,711.82
(b) Part II Estimates	...	...	776,853.83
Total 1954			<u>\$1,551,565.65</u>

Conclusion:

The past year has been one of considerable planning with the resultant pressure of developmental work on all connected with the Development Plan. The co-operation of all Heads of Departments is gratefully acknowledged. The willing assistance of the Public Works Department and the Medical Department has left nothing to be desired. School Committees, Head Teachers and Assistant Teachers, often working in very trying conditions, have shown throughout the year very real loyalty and enthusiasm for endeavouring to bring all approved Education Schemes to a successful conclusion within the limits of the Development Plan.

Departmental Head:

Mr. J. Pearce left the State on retirement on February 16th.

Mr. H. J. Padmore was appointed State Education Officer with effect from March 3rd.

DEVELOPMENT PLAN — PROGRESS OF SCHEMES 1954

<i>Scheme</i>	<i>Approximate cost</i>	<i>Category</i>	
1. Teachers' Training	\$40,000	1. Batu Lintang Training Centre	(a) The number of male Student Teachers in Training at Batu Lintang Training Centre was doubled (30 students) and the course of training extended to 3 years. Ten students graduated November 1954 and were placed in local schools on December 1st 1954. A further intake of 20 students will proceed to Kuching in January 1955.
		2. Kent College, North Borneo	(b) A 5 Year Scheme has now been approved for an intake of six women students annually to be trained at Kent College (2 years) British North Borneo. This scheme starts in March 1955.
	25,000	3. Kirkby College, United Kingdom	(c) The Kirkby Training Scheme was approved in April 1954. Five male Malay students from Malaya entered the Kirkby Training College, Liverpool United Kingdom in September 1954. The State Education Officer interviewed all these students in Kirkby College, United Kingdom at the end of September 1954. The first output will arrive in Brunei on secondment to Brunei Government in August 1956. This scheme matures when a total of 15 Trained Teachers from Kirkby have graduated. The State Education Officer visited Kuala Lumpur and discussed with the Director of Education Malaya further progress of this scheme.

Scheme	Approximate cost	Category	
1. Teachers Training—(Contd.)		4. Sultan Idris Training College Malay Women Training College Pupil Teachers	<p>(d) There were 2 men and 2 women in training during the year.</p> <p>Two Vacation Courses were organised for Male Pupil Teachers:</p> <p>(a) General Course from August 31st—September 9th at Government English School, Brunei Town.</p> <p>(b) English Course from December 10th—18th at Sultan Mohamed Jamalul Alam Malay School, Brunei Town.</p> <p><i>Colombo Plan:</i> One scholarship in Civil Engineering (Australia) and one Nursing (New Zealand).</p> <p><i>United Kingdom:</i> One scholarship in Agriculture and one in Administration.</p> <p><i>Malaya:</i> One scholarship in Forestry (Kepong) and two in Agriculture (Serdang). One Teacher Training (Singapore).</p> <p>Local scholarships (a) 4 were awarded to Malay boys for Secondary Education in Singapore and Malaya. (b) Seven local scholarships were continued for Malay boys attending Batu Lintang Training Centre and having Secondary Education at St. Thomas's School Kuching.</p>
2. Scholarships	\$ 4,000 15,000 15,000	Overseas Local	

DEVELOPMENT PLAN — PROGRESS OF SCHEMES 1954.—(Contd.)

<i>Scheme</i>	<i>Approximate cost</i>	<i>Category</i>	
2. Scholarships. —(Contd.)		Education Tour United Kingdom	Preliminary negotiations were carried out personally by the State Education Officer in consultation with the British Council London. Six teachers will proceed to United Kingdom for an Educational Tour in April 1955.
		Secondary Education in United Kingdom	Negotiations were started in London by the British Resident and the State Education Officer for obtaining four places in a recognised Boarding School. Four boys will be sent from Brunei to the Millfield School Devonshire around mid-1955.
3. School Buildings and Equipment	\$384,335	Primary	(a) Three new schools (additional) were completed at Kilanas, Sengkukung and Barubaru, totalling 10 classroom units. Ten Teachers' Quarters were built (semi-detached) in School Compounds. A Dining Hall was built at the S.M.J.A. School.
	303,071	Secondary	(b) Building operations commenced for the new Brunei Town Secondary School for Boys on August 10th 1954. This first phase includes 16 classrooms, staff rooms, dining rooms, kitchens and hostel with 100 beds. The second phase being a Practical Training Block including General Science, Physics, Chemistry Laboratories, Hostel Masters' Flat, Woodwork, Metalwork, Local Handicrafts Art and Library is expected to commence mid 1955. The last phase will include an Auditorium and Gymnasium.

DEVELOPMENT PLAN — PROGRESS OF SCHEMES 1954.—(Contd.)

Scheme	Approximate cost	Category	
3. School buildings and Equipment.— (Contd.)			<p>(c) A new site was selected for the Seria Secondary School within the zoned Government area of the town. Soil tests were completed in November 1954 and the site is now being cleared and sand-filled. Building should commence around mid 1955. Three additional Kajang Class room units (Temporary) were completed in time for the next intake of boys and girls.</p> <p>(d) Work was commenced on a Temporary New Hostel and Domestic Science block for Girls (50 beds) at the beginning of December 1954. It is hoped to segregate the girls from the boys secondary school by erecting a further block classrooms during 1955. Building should commence on the permanent New Secondary School for girls around mid-1955. This will include classroom accommodation for 200-300 girls with Hostel (100 beds) Domestic Science Centre, Dining Block and School Hall.</p>
4. Teachers' Quarters	—		<p>Building commenced on 5 Class 'C' quarters (S.M.J.A. compound) in November. Ten Teachers' quarters were completed in Country Schools. During 1955 contracts will be placed in conjunction with new school buildings. The housing situation in Brunei Town, Seria and</p>

DEVELOPMENT PLAN — PROGRESS OF SCHEMES 1954.—(Contd.)

Scheme	Approximate cost	Category	
4. Teachers Quarters.— (Contd.)			Kuala Belait will not improve until Teachers' Flats are erected. Housing sites in Urban Areas are strictly limited and the only solution is to build Flats in close proximity to the schools. An experiment of one block of Teachers Flats will be made next year in the zoned educational area of Brunei Town.
5. Grants-in-Aid	\$50,000		A grant of \$50,000 was made to the Roman Catholic Mission towards the cost of the erection of a large Primary and Secondary School (English) now being built in Seria (accommodation 1,000 children). It is likely that Government Policy will be reviewed after the report is received from the Woodhead Commission. No Government building grants were made to Chinese Schools during the year. Alterations and additions were made to the following Chinese Schools (a) Brunei Town, Chung Hua Middle (b) Labi and Kuala Belait.
6. Expatriate Staff	50,000 (approx.)		Between August and November the following United Kingdom Expatriate Staff arrived in Brunei— (a) Five Education Officers (3 permanent, 2 temporary on 5 year contracts). (b) Two Lady Education Officers (1 permanent and 1 temporary) (a) Home Crafts Specialist (b) General Subjects for girls

Scheme	Approximate cost	Category	
6. Expatriate Staff. —(Contd.)			<p>An Education Officer specialising in Youth Club work will arrive in April 1955. It is anticipated that the remaining two vacancies will be filled during 1955. The State Education Officer visited Singapore, Kuala Lumpur and Hong Kong and interviewed 20 candidates for 14 vacancies for English Teachers on contract in 1955. These will be placed in local Secondary Schools or be appointed as itinerant Teachers of English.</p>
7. Technical Training	\$64,248		<p>This was the first Development Scheme (\$1,000,000) to be approved for Education. Twenty-five boys entered the Preparatory Trade School in April 1954. The next intake will be delayed until June 1955 when it is anticipated the permanent Brunei Hostel Buildings will be completed (\$300,000 including equipment). Competition is keen for entry to this B.M.P. Company's Trade School and all boys selected have progressed satisfactorily during the year.</p>
8. Adult Education	6,286		<p>Only English Adult Education has been tackled during the year. The total number attending was 341. This will be stepped up during 1955 when more expatriate and Regional English Teachers will be available. It is doubtful whether the Literacy Campaign in Malay can be started before the middle of 1955. Necessary books and apparatus have</p>

DEVELOPMENT PLAN — PROGRESS OF SCHEMES 1954.—(Contd.)

Scheme	Approximate cost	Category	
8. Adult Education. —(Contd.)			been ordered. A very successful Typewriting class (20 students, all of whom were Government employees) taught by an European Stenographer was organised in July. It is hoped to include shorthand and other commercial subjects in 1955.
9. School Textbooks, Visual and Aural Aids	\$20,000		The State Education Officer contacted many Publishers in London regarding the supply of School Textbooks and Equipment. Orders are beginning to arrive for the Government Secondary Schools and Urban Malay Schools.
10. Games, Physical Training Apparatus	—		An additional \$5,000 was included in Part I Estimates for 1955. A Physical Training Specialist will arrive in the State early next year.
11. School Libraries	—		Arrangements have been made with the British Council London to supply at cost libraries for Government Secondary Schools. It is hoped to initiate a Travelling Library as soon as possible.
12. Production of Vernacular Literature	—		\$20,000 has been earmarked in the Estimates for 1955. A specialist will be arriving during 1955 to advise the Government on this vital scheme.

SUMMARY OF COST OF SCHOOL BUILDING AND EQUIPMENT 1954

<i>Schools</i>	<i>Estimates</i>	<i>Classroom Units</i>	<i>Teachers Quarters</i>	<i>Type</i>	<i>Cost</i>	<i>Equipment Furniture</i>	<i>Total</i>
Secondary ...	Part II	Incomplete		Permanent	\$ 176,471	\$ 60,000	\$ 236,471
Upper Primary	Part II	Incomplete		Permanent	22,000	24,000	46,000
Primary ...	Part I	10	10	Permanent	287,335	44,000	331,335
Secondary ...	Part II	10	Hostels 80 beds	Temporary	27,400	39,200	66,600
Primary*	Part I	16*	8*	Temporary	3,200	4,000	7,200
		36	18		516,406	171,200	687,606

*Note—Eight Temporary Village Schools were built by Kampong People. Government Grant of \$400 each school. Replacement by Permanent Government Building within 3 years.

5067

CAPITAL EXPENDITURE — PERMANENT SCHOOL BUILDINGS — DEVELOPMENT PLAN
PART II ESTIMATES
(In course of erection)

<i>School</i>	<i>Buildings</i>	<i>Equipment</i>	<i>Building Cost to date</i>	<i>Total</i>
		\$	\$	\$
Brunei Town Secondary School for Boys	16 Classrooms etc. Hostel — 100 beds	60,000 (approx.)	176,071	236,071
Sultan Mohamed Jamalul Alam Malay School	Dining Hall 300 places	24,000 (approx.)	22,000	46,000
Seria Secondary School (Mixed)	—	—	400 (soil test)	400
		84,000	198,471	282,471

CAPITAL EXPENDITURE — NEW SCHOOL BUILDINGS

PART I ESTIMATES, 1954

SOCIAL SERVICES

83

<i>School</i>	<i>Type</i>	<i>Accommodation</i>	<i>Furniture Cost</i>	<i>Building Cost</i>	<i>Total</i>
			\$	\$	\$
1. Kilanas (additional). ... Kilanas Teachers Quarters ...	3 units 2 Class F.	90 2 bedrooms	4,000 6,000	31,784 30,157	35,784 36,157
2. Sengkurong (additional) ... Sengkurong Teachers Quarters	4 units 2 Class F.	120 2 bedrooms	6,000 6,000	30,850 28,833	36,850 34,833
3. Baru-Baru ... Baru-Baru Teachers Quarters ...	3 units 2 Class F.	90 2 bedrooms	4,000 6,000	28,907 34,855	32,907 40,855
4. Lamunin Teachers Quarters ...	2 Class F.	2 bedrooms	6,000	30,000	36,000
5. Tutong Minor Works ... Tutong Teachers Quarters ...	— 2 Class F.	— 2 bedrooms	— 6,000	556 38,870	556 44,870
6. Kiudang Minor Works ...	—	—	—	3,557	3,557
7. S.M.J.A. Minor Works ...	—	—	—	3,610	3,610
8. Provision of Play grounds etc. all Schools above ...	—	—	—	25,356	25,356
Total ...			44,000	287,335	331,335

CAPITAL EXPENDITURE — SCHOOL BUILDINGS 1954 — DEVELOPMENT PLAN —
PART II ESTIMATES.
SECONDARY AND UPPER PRIMARY SCHOOLS — TEMPORARY BUILDINGS.

<i>School</i>	<i>Type</i>	<i>Building Cost</i>	<i>Equipment Cost</i>	<i>Total</i>
1. Brunei Town Secondary	... ..	\$	\$	\$
	5 Units	6,000	8,000	14,000
2. Additional Hostel, Dormitory for Boys	... ..	3,000	4,200	7,200
	30 Beds			
3. Seria Government English School	... ..	3,900	7,000	10,900
	3 Units			
4. S.M.J.A. (Upper Primary)	... ..	1,000	5,000	6,000
	2 Units			
5. Brunei Town New Girls Hostel	... ..	13,500	15,000	28,500
	50 Beds			
		27,400	39,200	66,600

(b) PUBLIC HEALTH**MEDICAL AND HEALTH DEPARTMENT***Introductory:*

In the State of Brunei, from 1927 to 1953, it was customary, when the Medical Officer of the State handed over to his successor, to have his name carved on a Shield which hangs outside the Medical Officer's Office in the General Hospital, Brunei Town, but towards the end of 1953 this custom stopped, because there was more than one doctor in the State.

During 1954 this progress continued, and by the end of the year there were five doctors, instead of one in 1952, and three in 1953.

Apart from Staff increases there was very little change in the general set-up of the Department. There was, however, much activity behind the scenes in connection with "Development", and therefore, it will not be until the 1955 Annual Report is published that the full value of the work done in 1954 can be assessed. In 1955 much may have to be experienced in the way of labour and, or, growing pains, but there is no doubt but that 1954 can be looked upon as a reasonable comfortable ante-natal period, in spite of one or two anxious moments which, from time to time, can be expected during any phase of Development.

General:

The work of the Department, as is the practice in most countries, was divided into Hospital, Rural and Public Health Sections, and to enable this work to be done there are two General Hospitals (150 beds in Brunei Town and 30 beds in Kuala Belait), two Outstation Dispensaries, 13 Urban and Rural Anti-Natal Clinics; four Riverine and two Road Travelling Dispensaries.

In addition to the above there was, within the State, a General Hospital belonging to the British Malayan Petroleum Company, and whereas this Hospital is an independent unit, a close liaison was maintained.

The total figures of attendances show that whereas in-patient work did increase, the out-patient clinics were less busy.

MEDICAL ATTENDANCE

<i>Brunei:</i>		1951	1952	1953	1954
In-patient	...	1,242	1,394	2,143	2,311
Out-patient	...	20,520	30,256	35,965	27,860

		1951	1952	1953	1954
<i>Kuala Belait:</i>					
In-patient	...	430	746	1,098	1,169
Out-patient	...	25,266	32,157	45,449	35,981
<i>Tutong:</i>					
In-patient	...	71	69	83	261
Out-patient	...	10,385	19,350	22,571	16,138
<i>Temburong:</i>					
In-patient	...	63	18	4	21
Out-patient	...	6,773	6,200	7,986	7,820
<i>(Total In-patients 3,762. Total Out-patients 87,799)</i>					

This is an unusual state of affairs, in the experience of the writer, and in an endeavour to explain it, it is suggested that the folk of Brunei are too busy working to worry about minor illnesses, but, when ill, are anxious to get better quickly, therefore seek admission to hospital, coupled with the possibility that there has been a general rise in the standard of living and an appreciation of the work of the Department, when things go wrong.

It is particularly gratifying to note that the In-patients increased in Kuala Belait, because it is there that the Department is in competition, so to speak, with the B.M.P. Co. Hospital. This rivalry is thought to be a good thing, especially as behind the scenes it has taken the form of good natured chaffing and mutual respect.

The following comparative tables cover the year's work and progress. — (Attention is drawn to the apparent decrease in Brunei and Kuala Belait Health and Maternity Centre figures. This was due to the fact that the work increased to such an extent that an additional clinic had to be arranged in each of these areas—namely, in Brunei, Kg. Ayer, and in Kuala Belait, Seria. The combined figures of Brunei and Kampong Ayer total 4,681 as against 3,482, while the figures for the Kuala Belait/Seria combination are 8,363 against 8,138).

HEALTH AND MATERNITY CENTRES

		1951	1952	1953	1954
<i>Brunei:</i>	Health Clinic Attendance	1,748	4,108	3,482	3,250
	Maternity Case	3,258	2,333	7,960	2,690
	Births	434	813	790	260
<i>Kuala Belait:</i>	Health Clinic Attendance	1,444	6,211	8,138	4,883
	Maternity Case	1,001	1,987	3,250	3,950
	Births	364	279	325	395

<i>Seria:</i>	Health Clinic Attendance	—	—	—	3,485
	Maternity Case	—	—	—	1,180
	Births	—	—	—	118
<i>Tutong:</i>	Health Clinic Attendance	—	525	532	561
	Maternity Case	—	243	650	830
	Births	—	53	65	83
<i>Brunei</i>	Health Clinic Attendance	—	—	—	1,431
<i>Kg. Ayer:</i>	Maternity Case	—	—	—	8,280
	Births	—	—	—	828
<i>Temburong:</i>	Health Clinic Attendance	—	—	—	404
	Maternity Case	—	—	—	500
	Births	—	—	—	50
<i>Sengkulong:</i>	Health Clinic Attendance	—	—	392	503
	Maternity Case	—	—	540	470
	Births	—	—	54	47
<i>Muara and</i>	Health Clinic Attendance	—	—	591	495
<i>Sarasa:</i>	Maternity Case	—	—	240	370
	Births	—	—	24	37

RURAL CLINICS

			1951	1952	1953	1954
Tanjong Maya	—	80	—	—
Berakas Estate	—	75	142	100
Lamunin	—	—	153	14
Baru2	—	—	130	126
Kilanas	—	—	63	93
Sinaut	—	—	50	104
Kiudang	—	—	61	30
Danau	—	—	115	105
Lumupas	—	—	50	44
Kumbang Pasang	—	—	99	59
Telisai	—	—	—	40
Batu Marang	—	—	—	62
Pengalan Batu	—	—	—	5

SCHOOL VISIT ATTENDANCE

			1953	1954
Brunei	...	...	2,332 pupils	3,673 pupils
Rural Area	...	...	34 pupils	223 pupils

TRAVELLING DISPENSARIES

			1951	1952	1953	1954
Brunei (Riverine)	...	...	608	1,143	1,446	1,968
Kuala Belait	...	...	839	1,325	3,208	3,621
Tutong	...	...	1,029	497	1,995	2,129
Temburong	...	...	707	1,268	1,180	1,217
Brunei (Road)	...	...	7,090	8,822	9,386	10,609

HEALTH VISITING

			1951	1952	1953	1954
Brunei	—	1,715	3,146	4,053
Kuala Belait	—	2,096	2,244	2,614
Tutong	—	336	3,054	1,762
Temburong	—	100	80	152

TOTAL ATTENDANCES FOR THE STATE

			1951	1952	1953	1954
In-Patients	...	...	1,806	2,227	3,328	3,760
Out-Patients	...	...	62,944	87,963	111,971	87,799
Births	...	...	2,805	2,809	2,903	3,332
Health Centres	...	...	7,447	14,639	25,807	28,303

Total: 123,194

There was very little change in the work of the Public Health Section. With only two Health Inspectors it was impossible to get outside the two Urban areas, a fault which must be rectified as quickly as possible.

The State Medical Officer sat in on the two Municipal Boards, and as far as possible an eye was kept on such matters as New Buildings and Sanitation. Residual Spraying was carried out in the two areas twice during the year and a small amount of other Anti-Malarial measures were undertaken.

There is much room for a general increase in the activities of this Section, but until the Staff is at least doubled the Public Health Section will continue to work under a very great handicap.

Details of the actual work carried out will appear later.

The School Feeding Scheme expanded rapidly, and at the end of the year only 6 schools, out of 46 had not joined the scheme. This was due to certain administrative difficulties. These difficulties, it is hoped, will be ironed out early in 1955.

During the year the following visits were paid to the Medical Department:—

Mr. W. F. Vetter (Architect)	22.1.54
Dr. Wilmot (W.H.O.)	12.5.54
Mr. L. L. Keys (W.H.O.)	15.7.54
Dr. W. G. Evans (D.M.S. Sarawak)	10.6.54
British Medical Association Party	16.7.54

DETAILED PROGRESS REPORTS

Brunei Town General Hospital:

No major alterations or additions occurred during the year, and thus the general unsatisfactory conditions continued. The

Situfoam material with which the buildings are made still continued to give trouble. Walls cracked; tiles fell off in whole wall lengths, and much money was spent on patching and painting.

The hoped for Ward re-arrangement did not materialize, and with the exception of one minor re-grouping of storage space, the general ward lay-out remained the same as 1953, with the result that the female Medical and Surgical Wards, and Maternity Ward are run as one unit. This is most unsatisfactory.

The Tuberculosis Wards were always full and, in spite of creeping into the so-called Mental Section, continued to be inadequate in numbers.

There was a general "shortage" of electricity, and when the Physiotherapy Department opened in August, special arrangements had to be made to boost the Hospital supply line. This shortage caused the postponement of the introduction of special sterilizers in the Tuberculosis Ward and Theatres.

The fall off in numbers of out-patients was welcomed by those in charge, as this section is particularly badly designed.

The bulk medical store was completely re-organised.

The laundry was inefficient in every respect, and until a new laundry is installed little can be done.

A Physiotherapist arrived in the middle of August, and in spite of not even having a room in which to work, after some re-grouping of stores, space was made available, and the work of the Department was well established before the end of September.

The types of cases which received treatment included fibrositis, rheumatoid arthritis, sinusitis, eustacean catarrh, sciatica, neuritis, post poliomyelitis, fractures and injuries to nerves and tendons.

Due to the non-arrival of certain pieces of apparatus, no skin cases were handled.

Kuala Belait Government Hospital:

Great improvements were made in this hospital during 1954. A new administrative block was opened, consisting of a Medical Officer's room, a dental clinic, Health Inspector's room, and a general office. The dispensary was enlarged to twice the original size and a convenient, good-sized store was arranged.

Separate rooms were made to receive male and female out-patients, and the out-patients' dressing room was enlarged and improved. In addition, a new male ward was opened to accommodate eight extra beds. A Class "F" quarter, adjoining the hospital was allocated by the Housing Board to house the Pathology Laboratory, and the new X-Ray apparatus.

The hospital kitchen was improved by the addition of a new washing sink and draining board. For the first time, a fence was made to enclose the whole hospital compound. A mortuary was completed, a new toilet and bathroom added for the use of male patients, and new washing facilities were arranged. In addition, the whole hospital was painted both inside and out, making a vast improvement in the general appearance.

The Sister-in-Charge was in New Zealand for almost the whole year and a temporary sister was employed until October. A part-time Sister was appointed to take charge of the wards from the middle of November, and the Health Sister returned to duty at the beginning of December.

Equipment—A general, all-round increase took place during the second half of the year—on wards; in out-patients; in dispensary; and in the Pathology Laboratory. The X-Ray apparatus was assembled and put into use.

Two Land Rover pick-ups were allocated, one as a replacement, and the other primarily intended for the Free School Meals Feeding Scheme.

At the end of 1954 the Hospital, Kuala Belait had 29 beds, (8 for male patients), 3 cots, 8 bassinets.

The State Anti-natal and Child Welfare Clinics:

In spite of being generally understaffed, the work of this Section was more than maintained. Both in Brunei Town and in the Kuala Belait District it was found necessary to establish two more clinics—Kampong Ayer in Brunei Town, and Seria in the Kuala Belait District. This arrangement reduced the pressure at the original centres, but practically doubled the working time of the Staff, as it was impossible to increase staff numbers.

The main event for the year was the winning of the Commonwealth Shield, judged on the accounts of the Baby Week held in 1953. The Shield will be retained for 3 years until the next "Baby Week" competition to be held in 1956.

From the end of June to the middle of July another Baby Week was held. Besides the baby judging, as many vaccinations were carried out as possible. Films were shown on worm and tuberculosis infections.

The places visited were as follows:—

		<i>Baby Show Entrants</i>	<i>Vaccinations</i>
Penghalan Batu	... ..	45	42
Kilanis	... ..	33	17
Kurdong	... ..	31	42
Ulong	... ..	37	—
Rambai	... ..	31	—
Baru Baru	... ..	55	23
Sungei Liang	... ..	59	41
Labi	... ..	88	74
Bukit Sawat	... ..	54	33
Kuala Belait	... ..	17	17
Lumapas	... ..	51	36
Lamunin	... ..	61	75
Totals	... ..	<hr/>562 <hr/>	<hr/> 400 <hr/>

In March cookery demonstrations were started and many rural areas were visited as well as many kampongs on Brunei River. The local people were shown how to produce simple meals from local foods in an effort to improve infant feeding.

During the year one midwife died who had worked on Kampong Ayer for 24 years.

Four midwives worked in Brunei Town, one at Tutong, one at Seria and three in Kuala Belait. Rural midwives worked at Senkurong, Kampong Sinaut, Muara, Serasa and Temburong. Three pupil midwives were employed.

In November a District Nurse arrived from England and took over all maternity and child-welfare work, such as nursing and school visiting, on Kampong Ayer, Brunei.

In December a Health Sister returned from New Zealand, having completed a Health Visitor's course. She is now Health Sister for Seria and Kuala Belait.

Two new clinics were commenced at Telisai and Batu Marang, the one at Lumapas re-opened after the pontoon re-commenced.

It was practically impossible to visit Lamunin owing to the bad state of the road.

It was not possible to visit regularly the Ulu Belait, Ulu Tutong and Ulu Temburong, although it was evident during Baby Week that there was an adequate population to warrant such clinics being held.

Towards the end of the year an issue of milk was given to ante-natal women in Brunei Town and Kampong Ayer who attended the clinics, as an experiment, but it is too early to judge the effect.

Nestle's continue to give a monthly allowance of milk, and the Red Cross still allow \$30.00 per month for extras.

The manufacturers gave generously in kind for Baby Week. \$850.00 was spent from the Maternity and Child welfare charity fund leaving a balance of \$550.00.

There has been no serious outbreak of infectious disease.

Outstation Dispensaries:

Building—No additional dispensaries were opened, Tutong and Temburong being the only two, and the figures for work done here has already been recorded on page 87.

Travelling Dispensaries:

Travelling either by road or river was the only link between the Department and the Rural people.

The road vehicles run chiefly round Brunei Town down as far as Tutong (27 miles) and up to Muara (15 miles). The roads were reasonable and the visits were carried out regularly.

On the rivers (S. Belait, S. Tutong, S. Batu Apoi, S. Temburong, S. Labu and S. Pandaruan), it is a different story. The

out-board type of engine was not satisfactory, and accident and engine break-down hampered the work. The launches, at times, were off their beat for days on end.

Extensive tours were made by the State Medical Officer up all the rivers in an endeavour to assess the needs of the Rural areas, and as a result of these visits he, at least, is convinced that this section of the Department's activities must be re-arranged. This can best be done by establishing up-river, small, static dispensaries, with smaller boats and engines for "local" touring.

The practice during 1954 was for a large river perahu to leave the bases (Kuala Belait, Tutong or Bangor) on fixed days and endeavour to make a complete run up into the hills. Sometimes the time-table was adhered to, but far too often, due to break-downs, the rendezvous was not kept, and as there were no means of letting the Kampongs know, many folk, having come down to the stopping places, returned to the Kampongs untreated and disappointed. With small up-river, permanent dispensaries, a great deal more can be done for these people. It is hoped that during 1955 all this will be changed.

Dental Service:

The staff of the Dental Section at the end of the year consisted of one Dental Officer, one Dental Assistant and one Attendant.

This is quite inadequate for the needs of the State.

The ideal Staff should consist of 3 Dental Officers, two Dental Nurses and one Dental Mechanic, if the State is to run an efficient service.

One extra Dental Officer is planned for 1955, and it is hoped to send the present Dental Assistant to the United Kingdom for special training as a Dental Mechanic.

The equipment, on the whole, was reasonable, but as, and when, the staff is increased, more and better equipment will be provided.

The greater part of the time was devoted to the treatment of school children, both in Brunei Town and in the Rural Areas, and the remainder of the time, to the treatment of Government

Servants and Out-patients. In the course of the year 29 schools were visited, and 1,893 school children were treated.

The response to dental treatment was, on the whole, encouraging, although a few cases refused treatment.

Some of the outstanding features among most school children, are the lack of oral hygiene and the irregularity of teeth. This is due to lack of dental education and care. The majority of the local people have to be educated to appreciate the benefits of good dental care.

The Education and Information Departments did help in this respect, by providing children with suitable literature and film shows.

The incidence of dental caries in the town is double that in the rural areas. This pattern of caries rate is similar to those of other countries. To remedy this tendency, many advanced countries are adding fluorides to their water supply to cut down the rate of caries. It is claimed that by this measure, caries rate can be reduced to 50%.

It is hoped that, in due course, time and money will be made available to, at least, investigate this problem.

Public Health Section:

Housing— The year saw the completion of all permanent shophouses in Brunei Town, construction of which began in 1951. There are now a total of 101 shops. Ten second class shops located along Jalan Tasek are nearing completion and should be ready for occupation early in the new year. Two rows of temporary shops, relics of immediate post-occupation construction, still mar the beauty of the new town, their demolition, however, has begun.

Seventy-three Government buildings were completed during the year, plus 5 private houses. This does not include houses built on the river bank which are exempt from submission of plans. There are approximately 1,000 houses, with an average of 7 persons living in each, on Kampong Ayer.

The Contractors' labourers lines, which caused considerable nuisance in the town area have been demolished and new lines erected on the outskirts of the Municipal area along Jalan Brakas.

In an attempt to alleviate overcrowding in the Kampongs, Government has built a block of flats of forty-five family units at Tasek. Erection of two similar blocks has been approved.

In Kuala Belait District, 40 shop-houses in Seria have been completed. The number of dwelling houses completed was 16 in Kuala Belait and 50 in Seria, and also 22 and 9 Government quarters in these same two areas respectively.

Conservancy:

Average number of buckets conserved daily—

Brunei Town	...	...	...	...	383
Tutong	...	...	...	...	35
Kuala Belait	...	...	...	...	587
Seria	...	...	...	...	510

Nightsoil collected was dumped in a crude state into rivers.

Sewerage disposal schemes have been prepared for Kuala Belait, Seria and Brunei Town, and it is understood installations will be in this order of priority.

Towards the latter part of the year, all Government houses built were provided with water-borne sanitation.

Scavenging:

Average amount of refuse removed daily—

Brunei Town	...	...	...	910 cu. ft.
Seria	...	...	...	1,937 cu. ft.
Kuala Belait	...	...	...	1,824 cu. ft.

In Brunei Town, refuse was dumped and burnt at $3\frac{1}{2}$ mile Tutong Road. There was considerable fly nuisance owing to partial burning. In September, control dumping under the supervision of the Health Department, was tried on a site in the Municipal Area. Refuse is dumped into a tidal swamp, covered by a layer of earth 1' to $1\frac{1}{2}$ '. This was done daily. The scheme is progressing satisfactorily. Since the inception an area of approximately 100' long to 14' wide was reclaimed.

In Kuala Belait, refuse was disposed by incineration (gas) on the river bank of J. Sungei.

In Seria, gas incineration was used to dispose of refuse. Scavenging services throughout the State have been fairly satisfactory.

Anti-Mosquito and Anti-Malarial Measures:

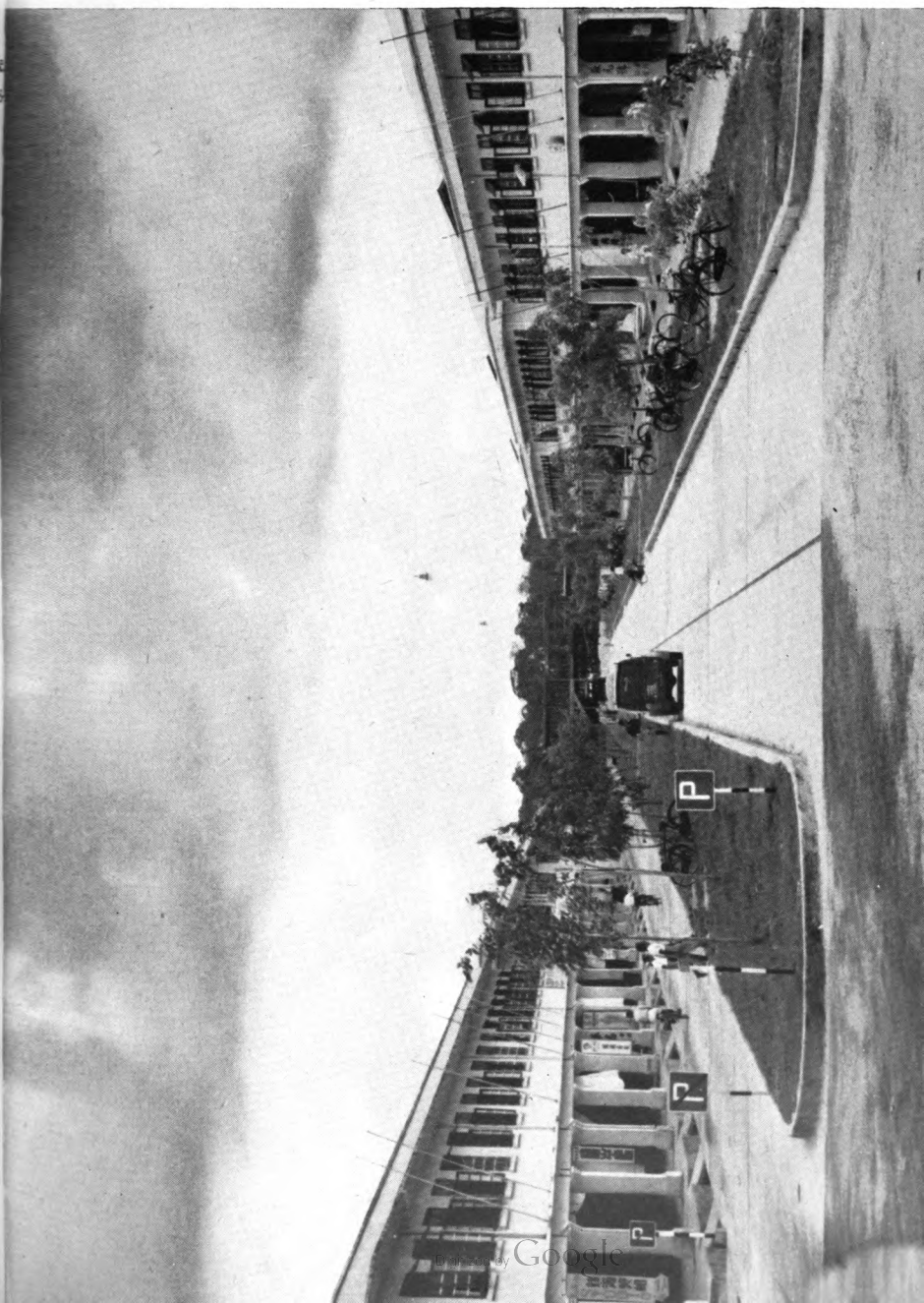
	<i>Brunei District</i>	<i>Kuala Belait District</i>	<i>Total</i>
1. Total amount of A.M. oil expended	6,844	29,480	36,324 gals.
2. Total number of Dieldrex 15 expended	63.3	—	63.3 gals.
3. Total amount of DDT Powder 50% expended ...	2,829	2,187	5,016 lbs.
4. Total amount of DDT Powder 75% expended ...	2,793	—	2,793 lbs.
5. Total amount of BHC Powder expended	1,625	1,120	2,745 lbs.
6. Total number of houses sprayed	2,037	—	2,037
7. Total number of persons protected	16,061	—	16,061
8. Total distance of earth maintained	44,858	—	44,858 1 yd.
9. Total number of sub-soil pipes used	2,000	—	2,000 p.

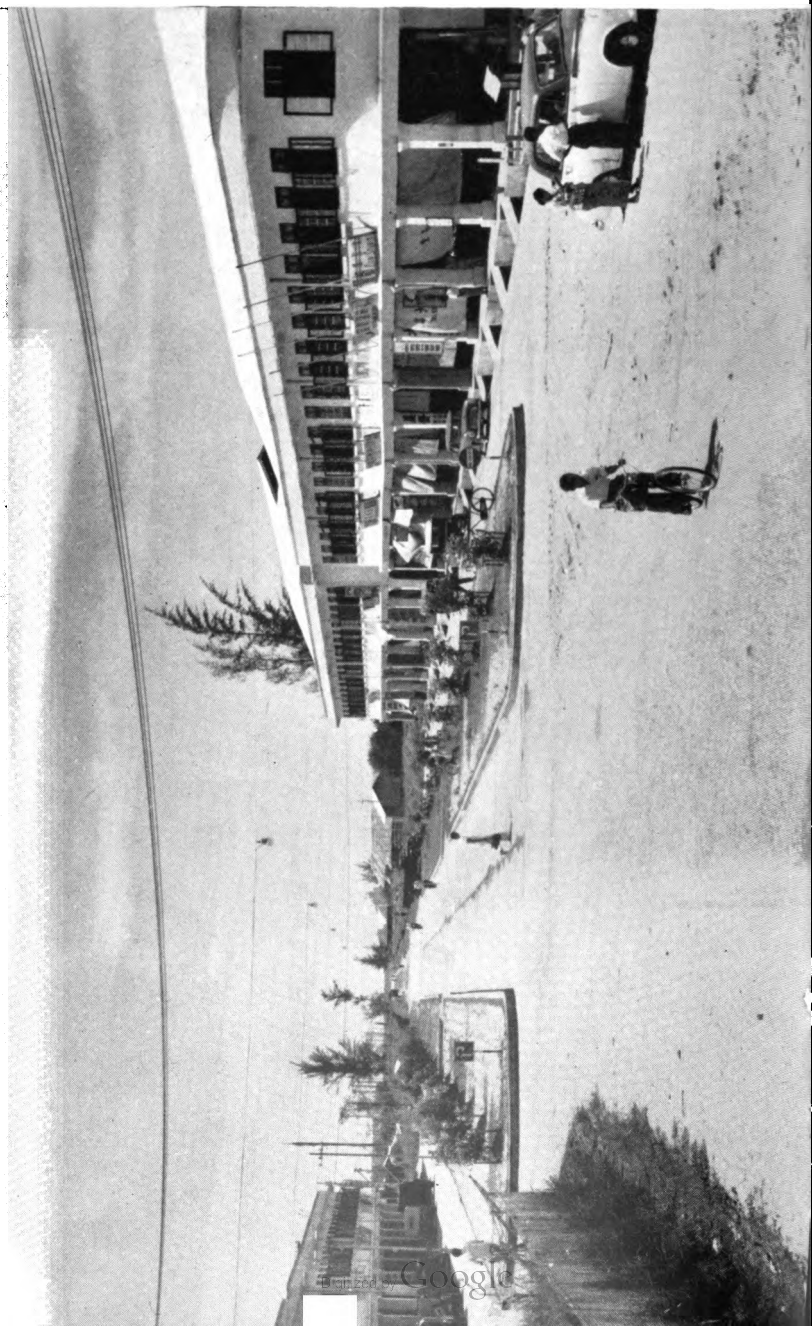
Record of Anophelines Collected:

<i>Anopheline</i>	<i>Number</i>	<i>Locality</i>
A. Leucosphyrus	43	Inside and outside Municipal Areas.
A. Karwari	18	Inside Municipal Area.
A. Baizai	10	Outside Municipal Area.
A. Barbirostris	17	Inside Municipal Area.
A. Kochi	38	Inside Municipal Area.

In addition to the above, and as part of a Malaria eradication project, a second residual spraying of houses in the Rural Area began in June and ended in September. The spraying team com-

Kuala Belait
Bazaar.





prised of two Malarial Inspectors, one foreman, one driver and 8 oilers.

	<i>Brunei District</i>	<i>Kuala Belait District</i>	<i>Total</i>
1. No. of houses sprayed	1,872	1,200	3,072
2. No. of persons protected	11,176	6,851	18,027
3. No. of working days	14	20	64
4. Amount of DDT powder used	2,216 lbs.	902 lbs. (Tech. grade)	
5. Area of operation ...	300 sq. m.	15 sq. m.	315 sq. m.

Innoculation (T.A.B.):

Total No. of persons inoculated	7,480
Total amount of vaccine used ...	6,750 c.c.

Summary—

Brunei District	2,986 persons (2,650 c.c.)
Kuala Belait District	4,494 persons (4,100 c.c.)

Out of a total of 7,480 persons inoculated, 6,755 were school children. Inoculations were done by a team of workers from Brunei Town under the supervision of the Health Inspector Brunei Town, and Health Inspector Kuala Belait.

B.C.G.:

No attempt was made to continue a state wide B.C.G. campaign, but in the Brunei Town and Kuala Belait clinics this inoculation was offered to all who wished to have it. Three thousand and seven hundred and forty-three persons were tested and out of these 1,511 were inoculated with B.C.G. There were no complications recorded or noted.

Port Health Work:

No. of foreign incoming vessels granted pratique,

<i>Brunei Town</i>	<i>Kuala Belait</i>	<i>Total</i>
26	68	94

No. of Optional Bill of Health issued

<i>Brunei Town</i>	<i>Kuala Belait</i>	<i>Total</i>
21	8	30

Animals Imported—

		<i>Brunei Town</i>	<i>Kuala Belait</i>	<i>Total</i>
Pig	...	1,684	3,772	5,456 head
Buffalo	...	671	330	1,001 head
Goat	...	170	143	313 head
Poultry	...	1,115	29,095	30,210 bird

These importations were mainly from neighbouring territories and Singapore.

Drainage:

Construction of storm water drains have increased considerably during the year, especially in Brunei Town and Kuala Belait.

Slaughter Houses:

The conditions of existing slaughter houses in the State are unsatisfactory. In Brunei Town, construction of two new slaughter houses began during the latter part of the year, and these should be ready for use early in the New Year. Provision has been made for new slaughter houses in Kuala Belait and Seria.

Ante-mortem inspections of all animals for slaughter were done daily.

		<i>Brunei Town</i>	<i>Kuala Belait</i>	<i>Total</i>
Pig	...	899	3,014	3,913 head
Buffalo	...	425	978	1,403 head
Goat	...	2	—	2 head

Water Supply:

Repeated bacteriological examinations of water supplies revealed an unsatisfactory state of affairs. In Brunei Town, Tasek Reservoir is the main water supply, in the Municipal Area, along J. Residency, there are five small water works. Two of these supplies go to Government houses, and the other three for Kampong Ayer. The Tumasek water works supplies water to the Astana and nearby houses. During the latter half of the year, a filtration and purification plant was under construction for the Tasek Supply.

The water supply in Tutong is often inadequate.

The water supply in Temburong and Muara are both adequate and good.

In Kuala Belait and Seria, there is often a water shortage. Some of the houses are supplied with water off the B.M.P. Co. mains, but the majority of the non-company people in these areas have to depend on rain water. The laying of water pipes and the construction of elevated water storage tanks to convey water from Sungai Badas, to these areas have shown good progress, and it is expected that pipe water supply may be available some time in the middle of next year.

Infectious Diseases:

Investigations, disinfectations, and examination of stools for carriers were carried out in all appropriate cases.

Four carriers of typhoid came to light when a patient from Senkurong was admitted for treatment. The carriers, all females, belong to a family of eight.

Culture of stools of close contacts of patients suffering from B. Dysentery, invariably revealed a carrier or two in the family. A. Dysentery is localised in the Rural Areas.

Licensed Premises, Hawkers and Stalls:

<i>Licence</i>			<i>Brunei Town</i>	<i>Kuala Belait</i>	<i>Total</i>
Hawker	...	...	39	185	224
Food Shop	...	...	11	69	80
Coffee Shop	...	...	23	62	85
Bakery	...	...	9	2	11
Vegetable	...	...	27	37	64
Fish	...	...	14	48	62
Chekor	...	...	11	—	11
Meat	...	...	6	—	6
Coffee Stall	...	...	2	14	16
Rice Mill	...	...	1	—	1
Sago Mill	...	...	1	—	1
Laundry	...	...	2	3	5
Ice Cream	...	...	4	2	6
Billiards	...	...	3	2	5
Lodging House	...	...	2	—	2
Aerated Water Fty.	...	...	3	—	3
Barber	...	...	5	10	15
Cold Storage	...	...	1	—	1
Total			164	434	598

In connection with the issue of the above licences, a total of 423 persons received T.A.B. inoculations, and the sputum of 764 persons was examined for tubercule bacillae.

All licensed premises and hawkers were regularly inspected.

The shortage of storage space in coffee and food shops presents a major problem.

A new and spacious market was completed in Brunei Town. The conditions prevailing in the existing markets in Kuala Belait and Seria were very unsatisfactory.

General:

Bore Hole Latrine— In conjunction with Baby Week, a “build more latrines” campaign was staged throughout the State. Demonstrations, lectures and film shows on the advantages and use of bore holes were carried out.

In the resettlement areas of Kg. Brakas Bahru and Kg. S. Muara, a total of eight holes were dug as a demonstration. The villagers, although they expressed great appreciation, have not dug a single hole themselves.

At the request of the Education Department, 36 holes were dug for the use in State Schools.

The villagers of Kilanas dug a total of 26 holes. This was the only village in the State which did so.

Plans A total of 379 plans for erection of houses, alteration and addition were inspected during the year.

Notices— A total of 53 notices was issued during the year and 62 minor offences were prosecuted in court.

Rodent Eradication— Traps and poisons were used. Table shows rats caught during the latter part of the year:—

Rattus Rattus	...	...	256
Rattus norvigicus	...	...	86
Total			342

Visits to Outstations— Regular visits were made to Kuala Belait District, Tutong, Muara, and Temburong. These visits were of inspection only. No major or even minor Public Health work was possible due to lack of staff.

THE STAFF OF THE HEALTH DEPARTMENT AT 31.12.54

			<i>Brunei Town</i>	<i>Kuala Belait</i>	<i>Total</i>
Health Inspector	...	...	1	1	2
Anti-Malarial Assistant	...	...	2	2	4
Health Mandore	...	...	1	1	2
Head Labourer	...	...	4	—	4
Labourer/Oiler	...	...	30	40	70
Driver	...	...	1	—	1

Until the Staff is increased very little more than “care-taking” can be done, and there is much to be done in both Urban and Rural Areas.

School Feeding Scheme:

This scheme which was introduced towards the end of 1953, quickly got into its stride in 1954, and out of a total of 46 schools only 6 had not joined up by the end of the year due to certain administrative difficulties.

The W.H.O. Nutritionist left about the middle of the year, but on 21st June, a full time Inspector was engaged.

This Inspector has worked hard and chiefly as a result of his tact and understanding the scheme, as a whole, ran smoothly.

In September, another W.H.O. Nutritionist paid us a visit and a general review of the meal was undertaken. As a result of this investigation a change of policy was considered necessary. Either a bigger and better meal must be served at 12.30 p.m., or the scheme should revert back to a mid-morning snack meal. No decision on this point had been reached by the end of the year.

The present meal for all ages is as follows:—

Rice 3 ozs, Vegetables 3 ozs, meat, fish or egg 2 ozs, peanut oil $\frac{1}{2}$ oz, plus curry stuffs.

The full meal advised is Rice 4 ozs, Vegetables 3 ozs, meat, fish or egg 3 ozs, peanut oil $\frac{3}{4}$ oz, plus curry stuffs.

Diets are varied as far as possible, but in remote Rural Areas, this was not always easy.

Roche mix is added to the rice.

Most schools, towards the end of the year ran their own cook-houses, and were paid between 40 and 45 cents per meal per head, according to the locality. Wages for the cooks were also paid by Government.

In Brunei Town the main Central Kitchen continued to run, and cooked in bulk, meals for 13 local schools.

This meal is appreciated by the pupils, especially in the Rural Areas, where children have often over an hour's journey by land or river before reaching school. This journey must be repeated after school hours, and the mid-day meal undoubtedly benefits these boys and girls in particular.

Although no records of weight were kept the general impression gained by those in contact with the children is that attendances had increased considerably and that the children are more active generally.

Teaching Department:

During 1953 the growing pains of this department nearly killed it, but after careful nursing by the Sister Tutor and other members of the Staff, signs of recovery were evident early in 1954, and by the middle of the year the School was in the best of health.

The report for 1954 is as follows:—

Personnel— Probationer Hospital Assistants 3, Intake 9, Wastage 1, Transferred to Kuala Belait Government Hospital 1, Total in Brunei Government Hospital 9.

Probationer Hospital Assistants stage of training— Government Hospital, Brunei, 1st year completed 5, 1st year 2 months 4, Completed training 2.

Assistant Nurses— Total 37, Intake 17, Wastage 11, (marriage 8 and family reasons 3), Transferred to Kuala Belait Government Hospital 3.

Stages of Trained and Training— Trained 7, sat and passed 1953. Trained 12, sat and passed 1954. In training 14 1st year, examination due April 1955. In training 2 one month.

*Aims of the Teaching Department:**Long Term—*

- (1) Recognition of training by General Nursing Council for England and Wales.
- (2) If this was granted, recognition would automatically follow in Malaya,
- (3) and would result in removal of difficulties when and if scholarships are awarded at some later date.

To achieve the above a new Teaching Unit was asked for of suitable size and design. This will be ready during 1955.

Teaching Equipment— This arrived and was put into use immediately, and consisted of:—

- (1) *Anatomical Models:* (Trunk, Alimentary Tract, Heart, Eye, Ear, Larynx, Kidney, Skin.)
- (2) *Charts:* (Hygiene—Sewage Disposal water).
- (3) Plasticine for Modelling, Black-board of suitable size, Chalks—coloured, Flannel graph.
- (4) *Text Books:* There were several additions to the library, but there was still a large gap. This will be filled during 1955.

The library should, when complete, be suitable for those in training and also the trained staff, in order that they may keep up to date with new procedures. It is also a useful method by which friendly interest and contact can be carried out, and good for morale, as immediate post-training days are difficult and anxious ones for the conscientious nurse.

Immediate:

It was decided that an attempt be made to improve the standard of training for Probationer Hospital Assistants and Nurses, and that the training, should be as far as possible, on a standard with that of an English Nurse.

With this in view, a syllabus was drawn up, based on those obtained from General Nursing Council for England and Wales, and from Malaya.

Practical work efficiency Charts were also obtained and were put into use. As a result of this re-organisation most of the nursing procedure have become standardised in the hospital; also gaps in ward equipment have been filled.

Examinations:

Twelve Assistant Nurses sat for the examination, 9 passed, 3 failed, these were given a further chance later, and all passed.

Other Activities:

Films— Medical, Education and General Knowledge films were procured and shown by the Information Department at the Teaching Department request.

Visits— “Snowman”, the bottling plant, Government Building, Inspection of Drainage Systems, Tasek as a water supply, Voluntary work with Mr. Yapp, Health Inspector,—innoculation.

English Classes— Seniors and Juniors were continued throughout the year, twice weekly—these were given by the Education Department.

Dietetic Display— A dietetic display was given by the Medical, Education Department, and Red Cross, in which practical methods were demonstrated, and many posters giving details of actual food values, were displayed.

Conclusion— The training and standards have been finalised. Probationer Hospital Assistants and Nurses have a completely separate syllabus from Assistant Nurses.

The Standard of Education for future candidates must be, Probationer Nurses and Hospital Assistants—Standard 7 and above. Assistant Nurses 3—5, and on completion of training, and obtaining the necessary percentage pass (50%), it is planned to issue:

- (1) Brunei Certificate of training.
- (2) Brunei Hospital badge.
- (3) That the Best All-Round Probationer Nurse or Hospital Assistant shall be given a Gold Medal.
- (4) That the 2nd Best, shall have a Silver Medal.

It is hoped that a State Registration Roll will be compiled in due course.

It was felt that by the end of the year the foundations of the School had been re-set, and that after much hard work to overcome many difficulties the "AIM" had been well defined, and the future held much that would be good and beneficial for the State.

All that is now needed is a steady stream of Standard 7 boys and girls for the Senior Course, and Standard 3—5 for the Junior one.

General Medical Store:

During July and August, the Medical Store, which previously had formed part of the General Hospital, Brunei Town, was re-organised on a State basis, and a complete new set of furniture and filing system installed. This filing system consisted of 972 cards for drugs, and 624 cards for instruments, a total of 1,596 separate items.

A total of \$150,000.00 was spent on drugs while \$10,033.32 was spent on instruments.

It may be of interest to some if a few figures of consumption were given and these are as follows:—

<i>Name of Drug</i>	<i>1953</i>	<i>1954</i>
"Asprin" tablets	49,750 tabs.	98,500 tabs.
Ferri Sulph. Pith	89,000 tabs.	159,000 tabs.
P.A.S. Tabs.	403,500 tabs.	629,000 tabs.
Gauze rolls	3,373 rolls	4,182 rolls

In addition over 19 new kinds of drugs were ordered and used, including the most recent advances in certain branches—especially the antibiotics (penicillin, aureomycin) and anti-tuberculosis drugs.

The general standard of care and maintenance of equipment and instruments, on the whole, was high, but as is the case throughout the medical world, the life of the hypodermic syringe was possibly merry, but certainly a short one, over 200 meeting an untimely end in the sterilizer.

Incidence of Disease:

Tuberculosis, as last year, continued to be the main disease of import in the State. Two thousand two hundred and ten persons were treated compared with 1,003 last year.

As quickly as possible this problem must be tackled, but it would be very unwise to jump into this battle without adequate pre-planning. Staff and beds must be organised first. This will take time, but unless it is done properly much distress and loss of ground will be the result.

At present there are 77 beds available, and these are always full. In an endeavour to "hold" this disease, all the latest drugs were made available and used to their full advantage.

The new shop-houses, which replaced the dreadful immediate post-war shacks, played an important part, as also did the free meals under the School Feeding Scheme.

It is hoped that during 1955 the preparation will be completed, the field cleared for action and a start made to cut down the ravages of this scourge.

Veneral Disease:

There was a slight increase in the number of cases reported. One hundred and forty-eight cases seeking treatment as compared with 46. The reason for this is thought to be due to the increase in "night-life" in the Urban Areas due to the arrival of the yokels from the hinterland, and the importation of labourers from abroad. In Rural Areas it was only after the greatest difficulty and search that two cases only were discovered.

Helminthic infections remained common, especially in the Rural Areas. A "dig-more-latrines" campaign seemed to fail—only one village made any attempt to help themselves. An anti-helminthic programme will be drawn up as soon as staff is made available.

It will be a tough battle, but one well worth while. If only the people themselves would assist the Department by using the bore-hole or pit latrine, cleaning up the surroundings of the bucket latrine, and stop using the nearest bush, much head-way would be made against this debilitating disease.

There was a small but mild epidemic of measles, and a more severe one of whooping cough in the Ulu Tutong.

The Malaria figures dropped from 3,062 in 1953, to 2,728 during the year under review.

There was an increase in the cases of Appendicitis. One hundred and thirty-eight cases as compared with 40. It is not considered that this is of any significance. More than likely, because there was an expansion of the Service, more cases came under observation and as a result more lives must have been saved.

There were 3 cases of diphtheria, 3 of leprosy, 3 acute poliomyelitis, 3 thyphus, 17 cases of schistomaisis.

There was no out-break of any dangerous or serious infectious disease.

Administration:

With the increase in the number of doctors the State Medical Officer gradually withdrew from the Medical Work, and spent more time dealing with administrative problems.

This has given the Department more balance, and as a result the work in the hospitals and clinics was intensified, due to the fact that the daily hospital routine was dealt with by the Medical Officers-in-Charge, who did not have to worry about matters outside their immediate sphere.

On the other hand, one stethoscope at least, was hung up in a place of honour in the Head Office to act as a reminder that once upon a time somebody had worked as a doctor.

The general atmosphere in the Hospital and Clinics was excellent. Everybody fitted into their place, and the team spirit was evident. As a result, in spite of serious shortage of staff, much more work was done than was expected.

The relationship between the General Public and the Department was good.

(c) HOUSING AND TOWN PLANNING

General:

Shortage of staff has prevented the completion of preparation of town plans in all except one or two small areas, the rate of development has also made it necessary to revise some previous ideas. It is possible that the implementation of the Development Plan will also result in population shifts, in fact there are already signs of this taking place although the actual numbers involved are as yet insignificant. It is necessary therefore to keep all plans flexible so that they may be adjusted as changing conditions dictate. The possibility of a deepwater port being developed at Muara is of particular importance since the commercial significance of Brunei Town would decrease appreciably as a result of such a project being implemented.

Brunei Town:

During 1954 the new shopping area of Brunei Town was completed, there are now 101 shophouses in the Bazaar Area and a further 10 smaller type shophouses are being built at Tasek. When these are completed the old temporary bazaar at Brunei will be demolished releasing about two acres of very valuable land.

In the vicinity of Brunei Town there is practically no unalienated land and implementation of the Town Plan will require the resumption of quite large areas at great cost. Steps are being taken to plan the Berakas area and already some three hundred acres have been utilized. It is intended to site sportsgrounds and a first class residential area in the vicinity of the Airfield Bypass road.

Much has been done to alleviate the acute housing situation, in addition to the 36 new shophouses completed in 1954, 82 Government Quarters of different categories were completed and 45 flats were approaching completion at the end of the year, in addition to this a large number of private houses were also built during the year. Considerable progress has been made in preparing sites for houses to be built in 1955 and the programme for the coming year should go far to alleviate a situation which is still far from satisfactory. It is also proposed to go ahead with

the construction of a further ninety flats but it is unlikely that these will be ready for occupation before the end of 1955.

Kuala Belait & Seria:

During the course of 1954, 51 Government quarters were erected in the district and 85 plans for private buildings in the Municipal Board areas were received and approved, but there is still a serious shortage of private dwellings.

During the course of the year, the Kuala Belait Municipal Board area was extended and zoned to include specific areas for 1st and 2nd Class residences, business premises, noxious trades, etc. The Seria Municipal Board area is being revised, and it is likely that similar zoning will take place. In October, 1954, His Highness the Sultan privileged the Seria community by his presence to open the new Seria Bazaar officially. There are now 1st Class shopping areas in both Kuala Belait and Seria, and during the course of 1955, an additional 2nd Class shopping area consisting of 42 shops will be opened up in Seria. When this happens, the old dilapidated shops in Seria will be pulled down.

The new Mosque in Seria presented by the British Malayan Petroleum Co., Ltd., to the Seria Malay Community to mark the coronation of His Highness the Sultan in 1951 was opened by His Highness the Sultan also in October, 1954. The Mosque must be one of the finest of its kind in South East Asia.

A new Customs house is being erected in Kuala Belait and will be ready during the course of 1955. A weigh-bridge was constructed near the wharf during the course of the year and is now in operation. During 1955, a new wall along the main wharf side will be constructed. A public Water supply is in process of being laid on and will shortly supply all the non-B.M.P. Co. requirements in both Seria and Kuala Belait. New generators are expected soon in Kuala Belait and Seria, and will allow an extension of the electricity supply to more houses and shops in those two areas. Gas is available to most houses and shops on request at low cost from surplus B.M.P. Co. supplies.

Good class hotel accommodation is non-existent in the district, which puts a considerable strain on the Government Rest House. It is hoped that some development in this direction will take place in 1955.

Space has been reserved in Kuala Belait for the building of private flats and offices.

(d) SOCIAL WELFARE

The following social welfare organization are active:—

The Boy Scouts Association
The Girl Guides Association
The British Red Cross Society
Rotary International.

There are also a number of Chinese Charitable Associations which cater for destitute members and in particular arrange for funerals and give assistance to dependents of sick members of the various Chinese communities.

During the course of the year, a Community Service Council was formed at Kuala Belait in order to co-ordinate the welfare activities of the various bodies and organisations concerned with social welfare services.

During the the year also, a Rotary Club was formed in Kuala Belait, dedicated to social welfare activity.

During the year arrangements were made for the payment of old age pensions to all persons over the age of sixty, provided, they are either subjects of His Highness the Sultan or have resided in the State for a minimum of thirty years. Actual payments will not, however, commence until 1955.

A State Religious Custom and Welfare Office caters for the occasional case of hardship and small pensions are paid to those who are disabled and who are in need. It is necessary however to point out that: the Malay, Dusun, Murut and Iban social structures are such that applications for assistance are rare, members of the family consider it their responsibility to take care of relatives who are in need and cases have occurred in which an offer of assistance has given genuine offence to those to whom it has been offered. In some cases the micro-community automatically accept responsibility where aid is beyond the resources of the family. A highly organized social welfare organization is therefore unlikely to be of much use at the present time, but the changing structure of local society may necessitate far more attention being devoted to this subject in the next decade.

Chapter VIII.

LEGISLATION

THE main body of the law consists of the enactments which have been passed from time to time by His Highness the Sultan in Council, certain Enactments of the Federation of Malaya, and certain Ordinances of the Colony of Sarawak, which have been adopted by the State with the necessary local alterations.

The external legislation which has been in this way adopted comprises the Civil Procedure Code, the Law of Evidence, the Law of Specific Relief and the Law of Contracts in force in the Federation of Malaya, and the Penal Code and the Criminal Procedure Code of Sarawak.

The language of all legislation is English.

It should be added that, by the Application of Laws Enactment 1951, where no provision is made by the enacted or adopted laws of the State, the common law of England, English principles of equity and statutes of general application have the force of law in the State.

The State Council met on thirteen occasions and the following Enactments were passed:—

No. 1 The Air Navigation Enactment.

This was designed to amend and bring up to date the law relating to air navigation.

No. 2. The Superintendent of Posts Enactment.

This gave legal effect to the change of title from Superintendent of Posts and Telegraphs to Superintendent of Posts.

No. 3 The Crown Agents (Change of Title) Enactment.

This was made necessary by the change in title of the Crown Agents from "for the Colonies" to "for Oversea Governments and Administrations". It has the effect that any reference in written laws or instruments made thereunder there is a reference to the Crown Agents by their former title it is construed as a reference to the Crown Agents by their present title.

No. 4 The Minor Offences (Amendment) Enactment.

By this certain small amendments were made to the Principal Enactment, Cap. 30; for instance, control and licensing of eating-coffee-lodging-houses etc. outside the municipal areas was taken out of the hands of the Chief Police Officer and given to the appropriate District Officer.

No. 5 The Customs Enactment.

This amended and consolidated the law relating to customs and the importation and exportation of goods and the recording of statistics thereof, brought that law up to date and into line with that in force in neighbouring territories.

No. 6 The Prisons (Amendment) Enactment.

This Enactment gave the Resident power to make rules concerning the conditions of service and discipline of prison officers.

No. 7 The Water Supply Enactment.

This provides for the control and regulation of the supply of water, both inside and outside the Municipal areas.

No. 8 The Police Force (Amendment) Enactment.

Under Part IV of the Principal Enactment, Cap. 50, power was given to constitute a reserve police force to be known as the Special Police Force. When it was decided in 1954 to constitute such a force it was also decided that it should be called not "the Special Police Force" but "the Brunei Volunteer Police Force". This Enactment gives legal effect to the latter decision.

No. 9 Reciprocal Enforcement of Judgments.

This Enactment provides for the reciprocal enforcement of judgments obtained in the Superior courts of the State, of the United Kingdom and of other parts of the British Commonwealth.

No. 10 The State Pensions Enactment.

This Enactment provides for pecuniary payments by way of old age pensions, pensions for blind persons, allowances for dependants of lepers and lunatics, disability pensions, and such other pensions and allowances as the Sultan in Council may prescribe, and for all matters incidental thereto.

No. 11 The Labour Code.

This amends and consolidates the law relating to Labour, brings it up to date and into line with that in force in neighbouring territories.

No. 12 The Road Traffic Enactment.

By this Enactment the law relating to traffic on roads and the control of the highways, which law was previously defective, was amended, consolidated, brought up to date and into line with that in force in neighbouring territories.

No. 13 The Land Code (Amendment) Enactment.

The effect of this Enactment is that land cannot be sold, mortgaged or leased to any person not a natural born subject of His Highness the Sultan unless the approval of the Sultan in Council to such sale, mortgage or lease has been obtained. Prior to this Enactment non-subjects who had resided in Brunei for seven years or over did not require such approval, but this qualification to the general rule has now been removed.

Chapter IX.

JUSTICE, POLICE AND PRISON

THE Courts constituted in the State for the administration civil and criminal law are as follows:—

The Supreme Court of Sarawak, North Borneo and Brunei, consisting of the Court of Appeal and the High Court,

Courts of Magistrates of the First Class,
Courts of Magistrates of the Second Class,
Courts of Magistrates of the Third Class,
Courts of Kathis.

This judicial system was created by the Sarawak, North Borneo and Brunei (Courts) Order in Council, 1951, and the Courts Enactment, 1951. The old Court of Appeal and the Court of the Resident have been abolished.

The Supreme Court:

The Supreme Court, which has a unified jurisdiction over the three territories of Sarawak, North Borneo and Brunei, consists of the Chief Justice (styled the Chief Justice of Sarawak, North Borneo and Brunei) and as many Puisne Judges as may from time to time be appointed.

An uneven number, not being less than three, of Supreme Court Judges constitutes the Court of Appeal. In certain special circumstances two Judges can constitute the Court. It deals with appeals, criminal and civil, from the High Court.

One Supreme Court Judge constitutes the High Court. The High Court has an unlimited original jurisdiction in all civil matters other than the annulment of marriages solemnized between Christians in the United Kingdom or any British Colony and matters concerning Mohammedan marriage, religion and divorce. It has an unlimited criminal jurisdiction in the case of all offences committed in the State or on the high seas on board ships registered in the State, or committed by subjects of the State

on the high seas aboard any ship, whether registered in the State or not. It may pass any sentence authorised by law, including sentence of death. Appeals lie to the High Court, in civil and criminal cases, from the judgments of First Class Magistrates, sitting in either original or appellate jurisdiction, and from the judgments of Second Class Magistrates.

Courts of Magistrates of the First Class:

The Court of a Magistrate of the First Class has original civil jurisdiction in suits involving not more than \$500 (which limit may be specially extended by the Chief Justice to \$1,000), and original criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by the law does not exceed two years and the maximum fine does not exceed \$5,000. The maximum sentences which may be passed by the Court are imprisonment for twelve months and/or a fine of \$1,000. The Court has an appellate criminal and civil jurisdiction in respect of case tried by Magistrates of the Third Class.

Courts of Second Class Magistrates:

The Court of a Magistrate of the Second Class has civil jurisdiction in suits involving not more than \$250 and criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by law does not exceed six months and the maximum fine does not exceed \$1,000. The maximum sentences which may be passed by the Court are imprisonment for six months and/or a fine of \$250.

Courts of Third Class Magistrates:

The Court of a Magistrate of the Third Class has civil jurisdiction in suits involving not more than \$50 and criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by law does not exceed six months, and the maximum fine does not exceed \$250. The maximum sentences which may be passed by the Court are imprisonment for two months and/or a fine of \$100.

Courts of Kathis:

The Court of a Kathi deals solely with questions concerning Mohammedan religion, marriage and divorce, and may impose a fine not exceeding \$50. Appeals lie from this Court to the Sultan in Religious Council.

Procedure in the courts is regulated by so much as is still in force of the Federation of Malaya Civil Procedure Code, by the Criminal Procedure Code, by the Courts Enactment 1951, by the Sarawak, North Borneo and Brunei (Courts) Order in Council, 1951, by the Sarawak, North Borneo and Brunei Court of Appeal Rules 1951, by the Supreme Court of Sarawak, North Borneo and Brunei (Appeal to Privy Council) Order in Council, 1951, by the Magistrates Courts (Civil Appeal) Rules, 1952, The Magistrates' Courts (Court Fees) Rules 1952, by the High Court of Sarawak, North Borneo and Brunei (Civil Procedure) Rules, the Magistrates Courts (Execution Proceedings) Rules, 1954, The High Court (Fees) Rules, 1954, and the High Court Execution Proceedings Rules 1954.

There were three First Class Magistrates, six Second Class Magistrates, two Third Class Magistrates and two Kathis functioning in the State during the year.

The following table shows the number of cases instituted and disposed of in the various courts:—

COURT RETURN OF FIGURES (CRIMINAL & CIVIL CASES) FOR THE YEAR 1954

118

JUSTICE, POLICE AND PRISON

CRIMINAL

District	No. of Cases in High Court	No. of Cases in 1st Class Magistrate's Court	No. of Cases in 2nd Class Magistrate's Court	No. of Cases in 3rd Class Magistrate's Court	Total	No. of Persons Sentenced	No. of Accused Discharged	No. of Cases Withdrawn	No. of Cases Pending	No. of Transfer
Brunei ...	7	25	264	14	310	279	7	10	14	—
Belait ...	11	153	1017	82	1,263	1,141	48	56	18	7
Temburong	1	2	17	—	20	14	3	2	—	—
Tutong ...	—	—	21	—	21	19	2	1	—	—
Muara ...	—	—	—	—	—	—	—	—	—	—
Total	19	180	1,319	96	1,614	1,453	60	69	32	7

CIVIL

District	No. of Cases Judge of Appeal	No. of Cases in High Court	No. of Cases in 1st Class Magistrate's Court	No. of Cases in 2nd Class Magistrate's Court	No. of Cases in 3rd Class Magistrate's Court	No. of Cases Dismissed	Amount Claimed	Total of Cases
Brunei ...	—	2	15	23	—	—	\$ 13,212.38	40
Belait ...	—	7	10	42	—	2	32,583.14	59
Temburong	—	—	—	1	—	—	92.26	1
Tutong ...	—	—	—	—	—	—	—	—
Muara ...	—	—	—	—	—	—	—	—
Total	—	9	25	66	—	2	45,887.78	100

<i>District</i>	<i>Letters of Adminis- tration</i>	<i>Probate (Re- sealing)</i>	<i>Coroner's Inquest</i>	<i>Criminal Appeal</i>	<i>Civil Appeal</i>
Brunei	6	—	3	2	—
Belaït	4	1	7	5	2
Temburong	—	—	—	—	—
Tutong	—	—	—	—	—
Muara	—	—	—	—	—
Total	10	1	10	7	2

NOTE:— 1. Of the 1,614 Criminal cases 1,605 were brought against adults and 9 were brought against juveniles. Of 1,605 cases brought against adults, convictions were registered in 1,444, 60 resulted in acquittal, 69 were withdrawn and 32 were pending.

Of the 9 cases brought against juveniles convictions were registered in 9, nil resulted in acquittal, nil were pending and nil were withdrawn.

2. Of persons convicted:

- (1) 85 were punished by imprisonments and fine, the most severe sentence imposed being 1 month imprisonment and a \$1,000 fine.
- (2) 38 were punished by imprisonment, the highest sentence imposed being 12 years.
- (3) 1,249 were punished by fine, the highest fine imposed being \$960.
- (4) 72 were discharged on probation.

POLICE

Command:

On 1st March, 1954, Mr. G. S. Wilson, Commissioner of Sarawak Constabulary, was gazetted as Commissioner of the Brunei Police Force when in the State.

Mr. A. C. Eattell, Superintendent of Police, commanded the Force as Chief Police Officer for the year until 27th December, 1954, when he proceeded on leave. Command was handed over to Mr. T. F. Stone, Assistant Superintendent of Police, who was appointed Acting Chief Police Officer.

Kuala Belait— Mr. P. J. Rewcastle, Assistant Superintendent of Police, handed over command of Belait District to Mr. C. S. Baker, Assistant Superintendent of Police, in April, 1954. In July Mr. Baker proceeded on leave and Mr. A. I. Edgerley, Assistant Superintendent of Police, O.C. No. 1 Field Force Platoon, assumed temporary command as Officer Commanding Police District, Belait District, until the arrival of Mr. T. F. Stone in October. On assumption of duty as Acting Chief Police Officer, Mr. Stone handed over command to Senior Inspector P. Jaya.

Brunei— Mr. B. N. Lewis, Assistant Superintendent of Police, commanded Brunei Police District for the year.

Special Branch— Mr. P. J. Rewcastle assumed command of the Brunei Special Branch in May, relieving Mr. F. F. Wemyss.

Immigration— Mr. F. F. Wemyss, Superintendent of Police, continued to be in charge of the Immigration Department. In October he proceeded on leave and retirement and his duties were carried out by the Chief Police Officer and Officer Commanding Police District, Belait, in addition to their substantive duties.

Special Duty— Mr. A. N. Outram, Superintendent of Police, was seconded for duty to Kuala Belait/Seria as Chief Instructor to the Oilfields Security Force in August and remained in the area until 30th October when the basic training was completed.

Field Force— Mr. A. I. Edgerley arrived in Belait District with No. 1 Field Force Platoon in January, 1954. This Platoon remained in the area until November when it was relieved by No. 2 Platoon under the command of Mr. A. S. Crunden, Assistant Superintendent of Police.

The Headquarters of the Force is at Kuala Belait.

Establishment and Strength:

There was no change in the Establishment during 1954. The following figures show the strength and establishment of the Force:—

			<i>Strength</i>	<i>Establishment</i>
Gazetted Officers	...	...	3	4
Inspectors	...	...	9	9
Sergeant Majors	...	...	3	3
Sergeants	...	...	10	16
Corporals	...	...	18	21
Lance Corporals	...	...	26	31
Recruits	...	...	15	—
P.C.'s	...	...	114	235
A.P.O.'s	...	...	34	—
			<hr/> 231	<hr/> 319
			<hr/>	<hr/>
			<i>Deficiencies</i>	<i>Surpluses</i>
Gazetted Officers	...	...	1	—
Sergeants	...	...	6	—
Corporals	...	...	3	—
Lance Corporals	...	...	5	—
Recruits	...	...	—	15
P.C.'s	...	...	121	—
A.P.O.'s	...	...	—	34
			<hr/> 136	<hr/> 49
			<hr/>	<hr/>

During the year 37 recruits were enlisted, whereas 4 men were retired on pension and 25 men resigned on completion of contract. Two men were medically discharged and 8 were dismissed, therefore of the 39 men lost to the Force, 37 replacements were enlisted.

No. 1 Field Force Platoon arrived in Kuala Belait/Seria Area in early January and was used in the Area until November when it was replaced by No. 2 Platoon. This addition to the strength and personnel in the Oilfields Area was welcome and has proved to be an asset.

The Oilfields Security Force was formed in August, 1954, and its strength is drawn from employees of the British Malayan Petroleum Company. This Force is established at 170 men who are used to combat industrial emergencies and to augment the regular Force in an emergency. The basic training was completed in November. A large scale exercise was held in December which indicated minor weaknesses in command, operation and organi-

zation but proved beyond doubt the major advantages of such a Force. It is under the direct command of the Chief Police Officer who operates through the Special Duties Officer, B.M.P. Company.

Health:

The health of the Force is satisfactory. Five men suffered from T.B. during the year, 2 of whom were discharged as medically unfit, while three are still on the sick list receiving treatment. One hundred and twenty-three men reported minor ailments and were awarded in all 219 days sick leave, whilst 28 men were hospitalised for 229 days. Of the latter figure, the 5 T.B. cases absorbed the majority of the hospitalization.

Discipline:

Minor Offences	...	...	28
Major Offences	...	...	18
		Total	<hr/> 46 <hr/>

As a result of the incidents referred to in Paragraph 4 of the Annual Report for 1953, it was found necessary to effect a change in command at Kuala Belait Police Station; the state of discipline in this station subsequently improved.

Statistics do not show any definite increase or decrease in the number of disciplinary offences committed. It is believed, however, the many Non-Commissioned Officers are reluctant to take disciplinary action where they should. Some weaknesses in the Inspectorate also require remedy.

Recruiting:

Thirty-seven recruits only presented themselves for enlistment during the year. They were not of high quality. It is not thought that the admittedly low pay is the only reason for this state of affairs; that the population of Brunei is not big enough to sustain a Police Force of three hundred men and that conditions of service are reputedly severe are equally important factors.

A Probationary Inspector was recruited in April, 1954, and awaits police training outside the Force.

Training:

During the year 37 recruits were trained in the Police Training School, Kuching, and were absorbed into the Force by the end of the year. Within the Force Riot Drill received concentrated attention during the year and a reasonably high standard of Riot Drill has been achieved. All ranks in the Force have fired an annual weapon training course and have fired range practices at Tutong Range.

No Inspectors completed training courses outside the Force during the year.

Transport:

The situation is very satisfactory and the Force is equipped as follows:—

Landrovers	...	...	12
Commer 5-ton trucks	...	...	2
Bedford 3-tonners	...	...	2
Bedford 15 cwt.	...	...	4
Motor Cycles	...	...	11
Fire Engines	...	...	2

Four of the Landrovers stationed at Seria are equipped with H.F. Radio sets controlled from Seria Police Station. Mobile Traffic and Crime Patrols are carried out on a twenty-four hour schedule and have proved a success.

The maintenance of the transport in the Kuala Belait District is carried out by Borneo Motors Ltd. on contract and the efficiency of the system is apparent.

Brunei District transport is well maintained by the Public Works Department.

Housing and Buildings:

The Field Force Barracks with accommodation for 100 men was completed and occupied during the third quarter of the year. Work on improvements, repainting, etc., to Seria and Kuala Belait Police Stations was started in December. The Immigration Department occupied the old Hongkong & Shanghai Bank building in the Kuala Belait Bazaar during the second quarter of the year. No other buildings were started during the year.

Signals:

Six "19" H.F. Radio Sets were obtained on hire from the Army during 1953 and were used to great advantage during 1954. Mobile radio sets proved an asset to traffic control.

Traffic:

Traffic accidents increased during the year due to the increase of transport in the area but the figure is not unduly high.

Crime:

There were two murders during the year, neither of which resulted in the death sentence. The only serious crime which was reported was 13 house-breakings, none of which was serious.

Aliens' Registration and Immigration:

During the year 31,070 persons entered the State whilst 29,306 left the State. The majority of the movements were by permanent residents leaving the State for short visits and returning thereafter.

During the year 856 aliens were registered. The numbers of other documents issued by the Immigration and Aliens' Registration Departments are as shown below:—

(1) Full visas and transit visas	...	...	1,679
(2) Certificates of identity (British subjects and subjects of His Highness the Sultan)	...	...	1,655
(3) Emergency Certificates	...	...	334
(4) Police 64 for non-British subjects	...	...	413
(5) Special passes	...	...	560
(6) Aliens' Registration Certificates	...	...	2,602

The total number of immigrants and emigrants crossing the borders of the State during the year is as follows:—

			<i>Male</i>	<i>Female</i>
Immigrants	...	...	22,289	8,781
Emigrants	...	...	21,239	8,067

The following comparative figures of persons travelling to and from Brunei Town and Labuan are of interest:—

			<i>Inward</i>	<i>Outward</i>
1951	...	...	2,731	3,090
1952	...	...	5,789	6,504
1953	...	...	12,018	10,601
1954	...	...	11,087	9,023

Figures concerning persons travelling to and from China during the year are as follows:—

	<i>To</i>	<i>From</i>
Total	49	9
Total number in age group 16-30	12	—
Total number of family groups ...	4	4
Number of re-entry permits granted	—	—

C.I.D. and Special Branch:

Special Branch for Brunei State comes under the direct control of the Assistant Commissioner, Special Branch, Kuching and the Officer in Charge of Special Branch, Kuala Belait, is not seconded for duty to Brunei State. In important and/or serious cases the Assistant Superintendent, Special Branch, Kuala Belait, assists the State Investigation Department.

Welfare:

Canteens are operated by a local contractor at Kuala Belait, Seria and Field Force Barracks. Messing facilities for bachelors are provided at Seria.

A Thrift and Loan Society which was organized in 1953 continues to function and is extremely well supported by all ranks of the Force.

Association football continues to be the most popular sport and the Police Football Team representing Belait District has done extremely well in local competitions.

Societies:

Five Societies were registered during the year, all of which were organized for welfare and cultural purposes.

General:

The year saw much improvement in the organization of the Force. The arrival in January of the Field Force Platoon and its subsequent installation in the Field Force Barracks in September, together with the provision of adequate transport, added much to the confidence of those concerned with the maintenance of public peace.

Another achievement of a high order was the recent training and organization of 175 members of the Oilfields Security Force of Special Police. The training, conducted by Mr. A.N. Outram,

Superintendent of the Police Training School, Kuching, lasted for two months from the beginning of September. The high standard of instruction given and the results achieved, caused much favourable comment and the organization is a substantial addition to the security forces available.

Other matters which were studied and acted upon during the year and which have improved, or will in the future improve the organization of the Brunei Police, are the following:—

- (a) The setting up of a Special Branch in the Oilfields Area;
- (b) the proposal to reinforce the Brunei Police with a contingent of Malayan Police on secondment;
- (c) the provision in 1955 of VHF radio equipped vehicles for the patrolling of the Oilfields;
- (d) the overhaul of the Oilfields Security Scheme;
- (e) the re-organization of the Immigration Department.

The continued development of the Oilfields and the inauguration of the Brunei Government five year development plan during the year necessitated close attention to security problems.

The large sums of money being spent have not only resulted in an increase in the numbers of workers directly employed on development, but has attracted to the State wage seekers of all descriptions. As a result there is, it is believed, a floating heterogeneous population of over 5,000 in the State. Although outward manifestations of restlessness have been few, a close watch on any tendency towards this State of affairs has been kept.

The provision, in the 1955 Estimates, for new police Stations at Labi and Sengkurong will provide reasonable police cover for the interior.

A police installation comprising Barracks, Administrative Offices and housing for the Officer Commanding Police District and Inspectors at Panaga in the centre of the Seria Oilfields should ensure greater security for that area.

Prisons:

The Prisons Department is now under the control of the Assistant Resident, Brunei, with the Officer Commanding Police District, Kuala Belait, as ex officio Deputy Superintendent for the Belait District. The actual report for prisons is being submitted by the Assistant Resident, Brunei.

PRISONS

The Prison at Jerudong was brought into use during the year and all long term prisoners have now been transferred there. The total number detained there has at no time been large and it is doubtful whether its continued use as a prison will be justified.

Prisoners are employed extra-murally where this is possible, but the shortage of land in the vicinity of the jail limits this to some extent, furthermore the upkeep of the jail compound and buildings makes it necessary for the majority of prisoners to be detailed for fatigue duties within the compound.

Youthful offenders are normally transferred to the boys home in Kuching which has facilities for rehabilitation and training not available locally. It is also hoped to transfer some long term prisoners to the Jail in Kuching where excellent facilities exist for giving prisoners training in trades.

Prison Statistics for 1954 are as follows:—

1. Classification of prisoners by race:

Chinese	...	...	136
Malays	...	...	26
Dayaks	...	...	16
Indian	...	...	1

2. Classification by age groups:

Under 20 years	...	11
20-25 years	...	19
26-30 years	...	24
31-40 years	...	25
41-50 years	...	65
Over 50 years	...	35

3. Classification of sentences:

Under 1 month	...	112
1-3 months	...	24
3-6 months	...	24
6-12 months	...	14
12-24 months	...	3
Over 2 years	...	2

Chapter X.

PUBLIC WORKS AND UTILITIES

PUBLIC WORKS

General:

THE total expenditure of the Public Works Department for 1954 was \$17,424,500 which shows an increase of 42.2% over the amount spent the previous year. Of this total \$11,907,500 was expended from Part I of the Estimates representing 72.2% of the approved programme. This compares quite favourably with the figures of 77% and 67% for 1953 and 1952 respectively. The remaining \$5,517,000 was expended under Part II of the Estimates for which a total of \$10,482,180 was approved for 1954 for works to be undertaken under the Development Plan over the years 1954-1958. The expenditure represents 52.7% of the approved expenditure, which although lower than the yearly percentage which must be reached, was very creditable considering the existing resources of the Department.

Great credit is due to the members of the Public Works Department, and to the State Engineer for his guidance in what has been a difficult year of planning and expansion to cope with the large programme of work ahead.

Staff:

There was a considerable improvement in the staff position during 1954, but with the large programme ahead of the Public Works Department it will be necessary to increase the staff still further in 1955. Negotiations are in hand for the appointment of five roads engineers, a mechanical engineer, an architect, and the technical assistants surveyors and Overseers necessary to assist them.

Throughout 1954 Mr. G. T. Myles, B.A., B.A.I. (Dublin), A.M.I.C.E., an Officer on secondment from the Sarawak Establishment continued to act as State Engineer, Brunei. Mr. P. G. Lindsay, Dip. C.E. (Sydney), filled the position of Assistant State

Engineer, Kuala Belait, and Mr. D. J. Causby, B.E. (Adelaide), an Officer on secondment from the Sarawak Establishment acted as Assistant State Engineer, Brunei. Mr. W. C. Wilkinson remained in charge of the Heavy Equipment Section, and Mr. J. A. Wood in charge of the Workshops, and in March, Mr. A. P. Jack was appointed Workshop Supervisor in Brunei. Mr. W. A. Doughty an old resident of Brunei commenced with the Department in June in charge of the Mobile Workshop and the training of local men in the use of equipment. Mr. Doughty's many years in Brunei and his mechanical ability make him an ideal man for this work.

In June Mr. Chong Thou Fah, Administrative Officer in the Brunei Government Service, was seconded from the Treasury to act as accountant in the Public Works Department. Mr. K. Natarajan and Mr. V. K. Pillai filled the position of Assistant Engineer in Brunei and Kuala Belait respectively. During 1954 two of the Senior Technical Assistants were promoted to Chief Technical Assistants, and three more Chief Technical Assistants were appointed on agreement. At the end of the year there was only one Senior Technical Assistant in the Department, but it is hoped to fill more of these posts in 1955.

The appointment of young local men as sub-overseers and mandores greatly improved the supervision of construction work. These men have shown promise in learning the work, and as they have gained more experience, have assumed greater responsibility. A special grade clerk was appointed for Kuala Belait, and six new clerks in both the Brunei and Kuala Belait Offices. They have been of great assistance in dealing with the increased amount of office work.

Labour:

The labour position improved considerably during 1954 but local skilled tradesmen are still difficult to obtain. This has been overcome to a large extent by recruiting men from Hong Kong on two year contracts. An additional number of local apprentices have been taken on to assist these men and it is hoped that they will eventually be capable of taking over the work. The purchase of additional earthmoving equipment has reduced the requirements for unskilled labourers and it is now possible to obtain practically all that are required.

Contractors:

A considerable number of new contractors have been registered in the State during the year. This has resulted in the tenders being much more competitive, and costs have fallen accordingly. Contractors are now more willing tender for work in outlying districts, and this has enabled the Department to carry out more work than is usually possible in these areas; during 1955 it is hoped to catch up on the backlog.

Materials:

Stone— During 1954 it was still necessary to obtain stone from the Butir quarry by river transport, but towards the end of the year the output of stone from the Berakas deposits was increased, thus making the Department less dependent on the inferior and more expensive stone from Butir. During 1955 it is hoped to increase the supply of stone from Berakas still further and to eliminate the use of Butir stone entirely.

The stone deposits at Berakas, which contain approximately 60% of sandstone pebbles and 40% of sand, appear to be quite extensive. A survey to discover the exact extent of these deposits is being carried out at present. One of the main difficulties encountered in developing the quarry has been the removal of the overburden which has varied in depth between 30 feet and 45 feet. Production from the quarry first began in July, and from then until the end of the year 51,000 cubic yards of stone and sand mixture for use as road base, and 4,200 cubic yards of suitable crushing stone was won. This represents a saving to Government of \$300,000 for the first half year's working of the quarry, where gravel cost \$4 per cubic yard compared with \$9.50 from Butir.

It is anticipated that 600 to 800 cubic yards of stone per day will be won during 1955. This will be screened and all stone over 3 inches will be passed to the crushers. Two 20" x 10" crushers and one 24" x 6" granulator are being set up over nine 60 ton storage bins, so that crushed stone will be gravity fed into the bins and thence by gravity to trucks. Production of crushed stone is expected early in 1955.

A deposit of sandstone pebbles at Muara Bluff was worked during the year in order to provide crushed stone for local requirements including the building of the High Commissioner's Lodge

and for a small amount of roadworks. A portable crusher was set up and by the end of the year a daily output of 30 cubic yards of crushed stone was reached. This stone is now being stockpiled for use on building and road reconstruction in the Muara area.

In the Belait and Seria districts stone supply presents a serious problem as it must all be imported. During 1954 the supply was maintained satisfactorily by importing from Brunei, Jesselton, Hong Kong and Singapore. Because of freight charges this stone was necessarily expensive, but it was found to be cheaper to import stone from the latter three places rather than bringing uncrushed stone from Brunei, and crushing at Kuala Belait.

The British Malayan Petroleum Company have recently begun working the gravel deposits in the bed of the Temburong River at Biang. The stone is carried to Seria by barges. By an agreement with the Government and the B.M.P. Company 10% of the stone is available to Government, and this 10% is now being used by the P.W.D. Kuala Belait.

Coral was still used in the Brunei area as a base course for roads, but it is hoped to eliminate its use altogether in 1955. The mixture of sand and stone from Berakas has proved to be very successful and is far cheaper than coral.

Sand— There are ample supplies of sand in the State but it is much too fine for good quality concrete work. By mixing it with stone dust from the crushers a much better material is obtained, but stone dust is not yet produced in sufficient quantities. With the installation of the crushers and granulator at Berakas there should be much more available.

Timber— Supplies of timber have improved considerably during the year, but difficulty is still experienced in obtaining well seasoned wood. Eventually it is hoped that the Public Works Department will be able to store large quantities of timber, and allow it to season properly but this will not be possible until 1956.

Belian attaps are now in plentiful supply for use on Government projects, but must all be imported from Sarawak. With the increasing use of asbestos pantiles for roofing, the demand for belian attaps has decreased considerably.

Land Reclamation:

In both Brunei and Kuala Belait there are many lowlying areas which require filling before they are suitable as building sites. During 1954 a considerable amount of filling was done on such sites.

Brunei— In the new P.W.D. area at Tasek a channel 1,000 feet long by 40 feet wide was cut to straighten the Sungei Tasek. This was completed in 1953 but early in 1954 approximately 12,000 cubic yards of fill was taken from nearby hills to reclaim the old river course. This increased and improved the area available for the P.W.D. compound. Considerably more filling was carried out in this area to raise the level of the ground prior to building.

A new area between Sungei Tongkadeh and Kumbang Pasang was selected for housing sites during the year. The area was heavily planted with rubber and was very swampy. Clearing has been carried out and filling is now in progress to raise the area of approximately 20 acres above swamp level. It is estimated that approximately 65,000 cubic yards of fill will be required.

Work on the extension to the existing Kianggeh channel was commenced in August and a channel 1,200 feet long by 10 feet wide was excavated to divert the water from Sungei Berangan. The final channel will be 35 feet wide, and the soil excavated from this will be used to fill in the old river bed. When completed this project will alleviate flooding in the upper reaches of the river and will also improve considerably the nearby residential and Chinese School areas. In addition to the estimated 18,000 cubic yards of fill which will be obtained from the channel a further 10,000 cubic yards will be necessary to fill the old river bed.

Many other smaller jobs were undertaken in Brunei Town and nearby areas, the total amount of filling for these being approximately 40,000 cubic yards.

Kuala Belait and Seria— For the first half of the year all filling in these areas was carried out by using contractors' trucks, about half the number being loaded by hand and the other half by the P.W.D. mechanical loader. By July P.W.D. trucks had replaced the contractors' in the Seria area, and in September all

loading of trucks was able to be done by mechanical means. With the increased efficiency gained by mechanical loading it was possible to carry out all the necessary filling. The volumes of sand removed from the beach at Kuala Belait and Sungai Bera was 308,000 cubic yards.

The sand filling was used in the Kuala Belait and Seria shop-house areas, Government housing and building site areas and for building up the level of the roads formation. The scheme for filling privately owned land at 10% of the cost to Government was started in the latter part of the year. This will allow private landholders to construct permanent buildings with proper drainage and other facilities, which when combined with the removal of the stagnant water in the swampy areas will mean much more healthy living conditions for many people.

P.W.D. Workshops:

This organisation is responsible for the operation of workshops in both Brunei Town and Kuala Belait, and for the maintenance, and repair of all Government vehicles plant and machinery. When it is possible to do so without retarding work on Government equipment, repairs to vehicles belonging to the Sarwak Government, Brunei Government Officers, and contractors engaged on Government work, are carried out in that priority. With the purchase of so much new plant the workshops in both areas were operating under very cramped conditions during 1954, and great credit is due to this section for the way in which they have dealt with their work under difficult conditions.

Brunei Town— During 1954 more than 180 items of Government vehicles and plant were maintained by the workshops in addition to those owned by contractors and other outside interests. A considerable amount of new machinery was purchased for installation in the new workshops under construction in the Tasek area, and with the aid of this and with the larger and more convenient buildings, work will be carried out more quickly. It will also be possible with the aid of this new equipment to carry out work which in the past has had to be done either in Seria, or outside of the State. It is expected that by mid 1955 the Workshop organisation in Brunei Town will be completely moved to the new site at Tasek.

During 1954 three men were sent to Singapore for training, two on specialised fitting and servicing work, and one was trained especially on the operation of diesel testing equipment which will be incorporated in the new workshop. Four men were sent to the B.M.P. Co. in Seria, two on a one year course on heavy equipment and two on a three year course at the B.M.P. Co. Trade School. A total of twenty fitters were recruited from Hong Kong in the latter part of the year thus relieving the pressure of work on the existing staff.

Kuala Belait— The site for the new workshops in this area has now been filled and during 1955 it is expected to complete most of the buildings. Two of the fitters recruited from Hong Kong were stationed in Kuala Belait and with their assistance it was possible to deal more effectively with the increasing heavy equipment and transport fleets.

P.W.D. Stores:

Unallocated Stores— The bulk of the stores for Brunei State are ordered through the stores in Brunei Town but there is a smaller store in Kuala Belait. The purchase of stores during 1954 amounted to \$585,745 while issues to the value of \$360,986 were made to various services including \$200,074 to contractors engaged on Government work. The balance of the value of stores at the end of the year was \$617,712. Lack of space was the main trouble during the year, but in 1955 when this organisation moves to the new area at Tasek this will be overcome.

Materials were purchased from the Crown Agents in London, business houses in Singapore and from a few local agencies. Prices for most materials remained steady throughout the year but for some items, due to very keen competition prices dropped to the lowest since the war. The supply position for most materials was good.

Workshop Stores— During the year a separate organisation was formed to deal with spare parts and accessories for plant and machinery. This store is now in the new Tasek area, and with the engagement of a full time storekeeper in November is now settled down, and dealing efficiently with the issue of machine spares. This store was previously run by the unallocated stores but with the increasing amount of machinery and vehicles it was found necessary to separate the two stores.

Buildings:

All Government buildings within the State were previously the responsibility of the Public Works Department, but owing to the staff shortage in this Department a number of the larger projects have been farmed out to architects who are responsible to the British Resident for the design and construction of the buildings. Works for which contracts have been signed and which are in varying stages of construction are the new Mosque, the Government English School and Hostel Brunei, Customs' Houses at Brunei and Kuala Belait, a block of 45 flats in the Tasek area, and the High Commissioner's Lodge at Muara. Preliminary plans have been drawn up for further buildings for the Government English School, Brunei, an English School at Seria, New Government Offices and Post Office at Kuala Belait, an International Club in Brunei and a Muslim Theological College.

Brunei District— During 1954 the new Government Offices were completed and occupied, thus relieving the severe overcrowding in the old kajang building. The past year also saw the completion of the shophouses in the town area and the demolition of most of the old ones. With the completion of the junior type shophouses in the Tasek area the last of the temporary shophouses will be vacated and demolished, and completion will be effected of the filling programme for low lying areas in the bazaar.

All buildings in the Brunei, Muara, Tutong, and Temburong areas were maintained and kept in good repair during the year. Repainting of many of the older quarters was carried out and improvements to some old type quarters were made in order to bring them to modern standards. This work will be continued during 1955.

Generally the construction of all buildings in the various districts was carried out satisfactorily, but quite a number were delayed because of the amount of site preparation necessary. The building of many urgently needed Junior Service quarters had to be delayed because there were no suitable sites, but an area behind Sungei Tongkadeh has now been set aside for that purpose and work on the site preparation is in hand. Building costs were considerably lower in 1954 than in previous post war

years, partly because of the lower cost of some building materials, but mainly because of keener competition between contractors, whose numbers increased greatly during the year.

Kuala Belait— The building section of the P.W.D. Kuala Belait completed a large programme of work during the year. This was largely possible because of the increasing number of contractors in the area. In this district building costs also decreased considerably, but because of the higher price of stone and some other building materials in this district, costs are still appreciably higher than for Brunei Town. The standard of workmanship improved under the increased supervision made possible by the appointment of daily paid mandores in charge of the projects.

SURVEY DEPARTMENT

General:

Mr. R. N. Baron was State Surveyor from the beginning of the year until he went on retirement leave on the 30th August 1954. The general running of the Department was then left to the Chief Draughtsman and the Supervising Surveyor, with the Assistant Resident as the nominal head. On the 29th November, Mr. M. J. Hurley was sent from Kuching, Sarawak to act as State Surveyor on temporary duty.

The field and drawing office output of work for the year compares favourably with the previous year. The field returns especially show a marked increase in output. In 1953, 2,281 lots were surveyed including new application, and revision surveys. In 1954 this was increased to 4,192 lots. Unfortunately the drawing office output of lots charted did not increase by the same proportion.

The general public measure the success of the Survey Department by the number of EDR's completed, in other words how many applicants for land have received their titles, and in this the progress of the Department has been disappointing. Of a total of 2,976 new applications for land of which surveys have been made, since the Department was formed, only 671 have received their titles. The drawing office has been handicapped by the shortage of trained draughtsmen, and by the lack of reliable cadastral sheets.

It is regretted that the lack of reliable cadastral sheets will be felt for some time to come, as no progress could be made on final charting owing to lack of theodolite controls.

The lack of experienced theodolite surveyors and computers is holding up the production of final sheets. The only remedy is the engaging of experienced staff to tackle these jobs, and at the end of the year one surveyor and one computer had been recruited, but had not arrived in the State. This however is still not sufficient staff, if, as has been said, the final charting and arrears of land applications must be up to date in two years.

The office accommodation although excellent is much too small for the increase of staff necessary to cope with the work, and early in 1955 extra office space has been allocated to the Survey Department. This unfortunately means splitting the drawing staff in two separate offices. Although this is much better than having two draughtsmen sharing the same table, it is recommended that at the earliest opportunity some alternative accommodation is provided where the survey department can be in one office.

WATER SUPPLY

Brunei Town:

The supply of water to Brunei Town consists of one major source of supply at Tasek and several other supplies from small streams and springs. The supply from Tasek which caters for practically the whole of the town was found to be inadequate and not sufficiently pure to conform to present day requirements. A scheme was prepared to install filters and a storage tank for the purified water, and this scheme is now nearing completion. Four pressure filters supplied by Jewell Filter Company have been installed and two pumps capable of pumping 500,000 gallons in 10 hours have arrived. The filter house and storage tank are under construction and good progress is being made, the only hold up being the delay in receiving some of the pipe work. It is expected to have this scheme operating by about mid 1955. A further scheme to connect the main storage tank to a subsidiary tank in the Kumbang Pasang area and from thence to supply water to the neighbouring quarters and to the airfield, is now in hand.

The following figures show the amount by which water consumption in Brunei Town has increased during the past few years:—

<i>Year</i>				<i>Average Daily Consumption</i>
1952	...	..	...	239,670 gallons
1953	...	...	...	288,870 gallons
1954	...	...	...	355,600 gallons

The highest consumption during the year was in December when the average was 419,200 gallons per day, while on one particular day the consumption rose to 430,000 gallons.

Due to expansion of the town during the year it was necessary to double the capacity of the existing tank in Kumbang Pasang in order to provide sufficient water to new Government quarters there. In the same area, which has expanded rapidly during the year, a new pump and a small tank were installed to provide water to new quarters on higher ground, and a small stream was dammed, and a temporary pump and tank installed to supply the new class B quarters. Two new concrete dams were constructed along the Residency Road to replace old ones which supplied water to the people from Kampong Ayer. One is 40 feet long and 5 feet high and the other 15 feet long and 5 feet high. Both are functioning satisfactorily.

During the year new mains were laid in many places in the shophouse area and the improvement of supplies to other areas involved the relaying of some mains. The total length of mains laid and renewed was as follows:—

6"	...	...	...	143 feet
3"	...	...	...	5,440 feet
2"	...	...	...	2,680 feet
1½"	...	...	...	3,550 feet
1"	...	...	...	2,950 feet

Connections to Government buildings amounted to 53, while 49 connections to private houses were made. Contractors are supplied and charged for water used on buildings operations and 31 temporary supplies of this nature were made during the year. Five new standpipes were erected for the use of the public.

Kuala Belait & Seria:

By the end of 1954 all materials for the new water supply for Kuala Belait and Seria had been delivered, and work was proceeding satisfactorily. The water for this scheme will be supplied from the water treatment plant of the B.M.P. Company at Seria, from where it will be pumped to high level service tanks at Seria and Kuala Belait and from these tanks through 8", 6" and 4" diameter reticulation mains to the two towns. The completion of this scheme in about May 1955 will mean the removal of severe rationing, filtered water in place of the present unsatisfactory supply, and adequate pressure for all needs, including many potential consumers who have necessarily been refused supply hitherto.

Distribution mains have been extended during the year as below:—

2" diameter pipe	...	4,300 feet
1½" diameter pipe	...	600 feet
1" diameter pipe	...	3,500 feet

Muara:

The water supply to the town of Muara was found to be inadequate, and in order to obtain a sufficient supply of good water it was decided to use a spring on the road to Muara Bluff. A steel tank 16 feet by 12 feet by 8 feet deep was erected on reinforced concrete posts and beams, and a pump was installed to pump the water from the spring to the tank. The dam around the spring was enlarged considerably in order to give a bigger storage and a pipeline of 4" diameter asbestos cement pipes 7,675 feet long was laid to the town.

Serasa:

An earthen dam was erected to impound one of the streams near the village and a pipeline consisting of 900 feet of 3" diameter pipes and 2,335 feet of 2 inch. diameter pipes was laid. Only a few lengths of 1½" diameter pipe are now required in order to supply water to the village.

Kapok:

A supply similar to but much smaller than Serasa was provided to this village during the year.

Jerudong:

The old steel tank at Jerudong was found to be too low to supply water to the new barracks and quarters, and it was necessary during the year to erect a new one at a higher elevation.

Bangar:

In order to obtain a better supply in this area it was necessary to replace 1,000 feet of 2 inch. diameter pipe with 3 inch.

Batu Marang:

In order to increase the supply of water to this kampong it was necessary to replace the existing 2" and 1½" pipes with 500 feet of 3" diameter and 533 feet of 2" diameter pipes. The old dam was also replaced by a more substantial new one.

Minor Supplies:

Many schools and quarters in outlying areas were supplied with water by sinking a well and providing a semi rotary pump to lift the water to a small tank from which the water was supplied by gravity.

GAS SUPPLY

This is confined to the Kuala Belait and Seria areas where waste gas from the oilfields is utilised. A total number of 357 quarters are supplied in these areas by the P.W.D. distribution mains in addition to the much larger number provided for by the B.M.P. Company.

Mains and service connection were extended during 1954 as follows:—

2" diameter pipe	...	700 feet
1½" diameter pipe	...	4,100 feet
1" diameter pipe	...	100 feet
½" diameter pipe	...	2,000 feet

ELECTRICAL DEPARTMENT

During the year 1954 the Electrical Department continued to be in the unenviable position of being unable to meet the rapidly increasing demand for electricity due to insufficient generating plant and distributing materials. Nevertheless, inspite of dis-

appointments and frustrations experienced, considerable progress was made towards obtaining the maximum possible output from existing plant. This was achieved by making the best use of local resources and ingenuity. As in 1953 much time and energy had to be applied to securing the maximum possible restriction of demand at peak load periods in view of the shortage of available transformers and distribution system.

It is satisfactory to record that even under adverse circumstances, the total units generated and purchased by the Department amounted to 1,534,521 an increase of 475,927 units on the previous year.

To meet the continued demand for electricity in towns and major villages, development plans are under consideration. However, as an interim measure 4-280 K.W. generating sets have been ordered through the Crown Agents during the year under review and these sets are expected to arrive in 1955.

The total revenue of the Electrical Department for the period under review was \$284,677.38 an increase of \$94,467.38 on the previous year.

Apart from certain work which cannot be undertaken by any other electrical contractor the only outside work undertaken by the Electrical Department is the maintenance of electrical installations, the initial installation of electrical wiring and the replacement of old electrical wiring in Government quarters and buildings.

No accident occurred during the year.

BRUNEI TOWN

The operation of the Power Station in Brunei Town continued satisfactorily and the addition of one 150 K.W. Ruston, Hornsby oil generating set in November brought the total capacity of the Station to 450 K.W.

The total units generated during the year under review was 971,300 an increase of 153,739 or 17 per cent over the previous year. The maximum load recorded during the year was 295 K.W. and the load factor was 37.6 per cent.

The generating sets gave excellent performance throughout the year without a single breakdown.

Distribution:

The entire overhead distribution system was regularly patrolled and maintained in efficient condition throughout the year. Owing to the insufficient capacity of the Station feeders and transformers it was not possible to remove some of the restrictions imposed on consumers, but it is hoped that all restrictions will be removed in 1955 when sufficient generating sets and sub-stations became available.

Consumers:

The total number of consumers connected at the end of the year was 878 showing an increase of 182. In Government quarters and buildings 870 new points were wired and 45 existing points rewired and 114 new ceiling fans were installed.

Meters and Protection:

The total number of meters installed at the end of the year was 957 compared with 781 in 1953. Dispute tests were carried out on two meters and the deposits in respect of both were retained.

The protection system operated satisfactorily.

Public Lighting:

The total number of street lamps connected at the end of the year was 70 compared with 67 in 1953. Routine inspections and re-lamping were maintained throughout the year.

Domestic Appliances:

Details of domestic apparatus on hire at the end of the year are given below:—

	1953	1954
Cookers	5	8
Water Heaters	8	13
Ceiling Fans	12	14
Table Fans	32	37
Refrigerators	98	125
Air Conditioner	1	1

Statistics:

		1952	1953	1954
Lighting Consumers	...	465	542	653
Power Consumers	...	122	154	225
Total Consumers	...	587	696	878
			1953	1954
Total units generated	...	...	817,561	971,300
Total units sold	...	...	593,692	799,097
Total units used in works	...	...	7,632	15,129
Total magnetising units	...	...	—	18,372
Total units unaccounted for	...	...	—	14%
Number of gallons of fuel used	...	...	51,930	66,935
*B. Th. U's per unit generated	...	...	—	12,088
Installed plant capacity	...	...	322	450
Maximum demand	...	...	200	295
Load factor percentage	...	...	—	37.6

KUALA BELAIT

The operation and maintenance of the Power Station in Kuala Belait continued satisfactorily and the addition of one 85 K.W. McLaren oil generating set in August brought the total capacity of the station to 257 K.W.

The total units generated and purchased during the year under review was 453,188 and increase of 345,938 units over the previous year. The maximum load recorded during the year was 154 K.W. and the load factor was 32.3 per cent.

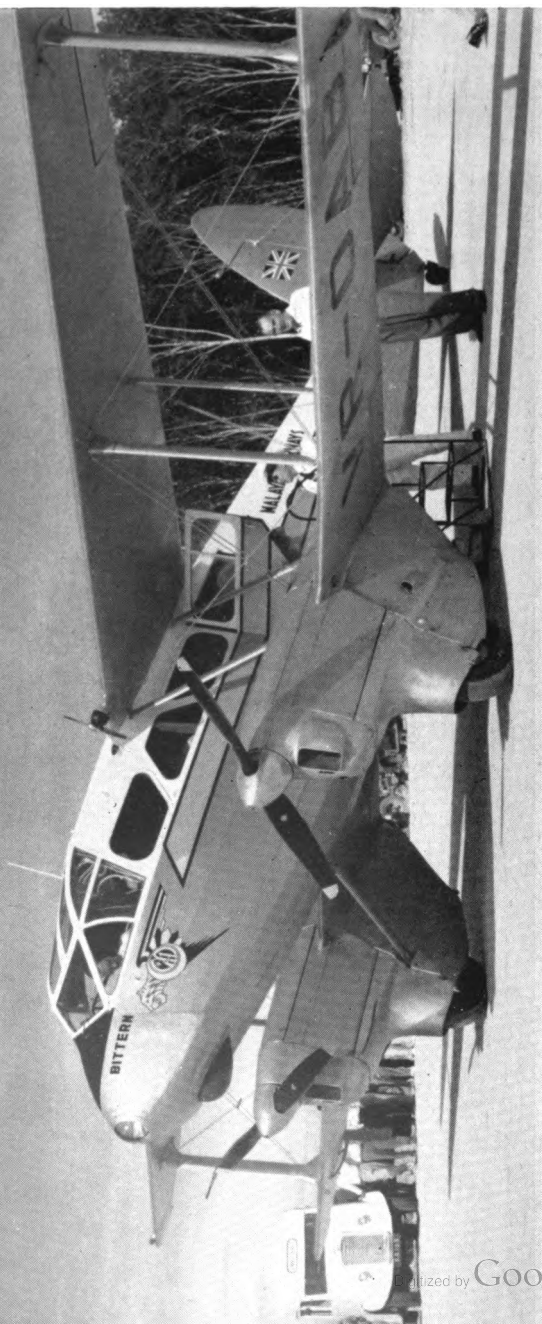
The Ruston Hornsby generating sets, but for 85 K.W. McLaren set, gave excellent performance throughout the year without a single breakdown.

Distribution:

The entire distribution system was regularly inspected and maintained in efficient condition throughout the year. It is hoped by next year most of the Kampong and private houses will be supplied with electricity when sufficient generating sets and sub-stations became available.

*B. Th. U's per pound of fuel are taken as 18,800.





Consumers:

The total number of consumers connected at the end of the year was 508 showing an increase of 158. In Government quarters and buildings 593 new points were wired and 25 existing points rewired and 29 new ceiling fans were installed.

Meters and Protection:

The total meters installed at the end of the year was 158 and the protection system operated satisfactorily.

Public Lighting:

The total number of street lamps connected at the close of the year was 50 compared with 28 in 1953. Routine inspections and re-lamping were maintained throughout the year.

Domestic Appliances:

Details of domestic apparatus on hire at the end of the year are given below:—

	1953	1954
Cookers	—	—
Water Heaters	—	—
Ceiling Fans	—	—
Table Fans	—	3
Refrigerators	18	34
Air Conditioner	2	2

Statistics:

	1953	1954
Lighting Consumers	300	347
Power Consumers	50	161
Total Consumers ...	350	508

	1953	1954
Total units generated	107,250	436,486
Total units purchased	106,355	16,702
Total units sold	169,470	405,232
Total units used in works	202	4,254
Total units unaccounted for	43,933	43,702
*B. Th. U's unit generated	—	14,738
Installed plant capacity	172	255
Maximum demand	—	154
Load factor percentage	—	32.3%

*B. Th. U's per pound of fuel are taken as 18,800.

SERIA

The Power Station came to operation on the 12th of September and the total installed plant capacity is 140 K.W.

The total units generated and purchased during the year under review was 110,033 units. The maximum load recording was 60 K.W. and the load factor was 29.5%.

Distribution:

The entire overhead distribution system was regularly inspected and maintained in efficient condition throughout the year.

Consumers:

The total number of consumers connected at the end of the year was 143 showing an increase of 103. In Government quarters and buildings 250 points were wired and 4 existing points rewired and one ceiling fan was installed.

Meter and Protection:

The total number of meters installed at the end of the year was 143 and the protection system operated satisfactorily.

Public Lighting:

Necessary work is in progress to provide public lighting in the coming year.

Domestic Appliances:

Details of apparatus on hire at the end of the year are given below:—

	1953	1954
Cookers	—	—
Water Heaters	—	—
Ceiling Fans	—	—
Table Fans	—	—
Refrigerators	1	2
Air Conditioner	—	—

Statistics:

	1953	1954
Lighting Consumers	37	107
Power Consumers	3	36
Total Consumers	40	143

		1953	1954
Total units generated		—	47,110
Total units purchased		27,428	62,923
Total units sold		22,750	91,720
Total units used in works		—	1,893
Total units unaccounted for		4,678	16,420
Installed plant capacity		—	140
Maximum demand		—	60%

General:

The Financial Report and Statement of Accounts are shown in Appendices "J" to "N".

The State Engineer, Mr. G. T. Myles, B.A., B.A.I. (Dublin), A.M.I.C.E., was Officer-in-Charge of the Electrical Department up to 30th June, 1954, and Mr. E. Rajaratnam, A.I.E.E. (Eng.) substantive holder, was appointed as State Electrical Engineer with effect from 1st July, 1954.

Chapter XI.

COMMUNICATIONS

SHIPPING

BRUNEI ports, commencing from the western end of the State are as follows:—

Kuala Belait:

Kuala Belait, situated on the right bank of the Belait River about half a mile upstream from the river mouth.

Facilities— There are four wharves in Kuala Belait, the largest of which is steel piped and sand filled and of approximately 375' in length. This wharf is owned by the British Malayan Petroleum Company and is used mainly by the Company's vessels—commercial and other craft proceeding direct to the two Government wharves situated a short distance further upstream. The two Government wharves, one of which is timber and the other of reinforced concrete are both 72' in length.

The total effective length of wharfage in Kuala Belait is 631', 75% of which belongs to the Company. The two Government wharves, however, are approximately 200' apart, and it is proposed to commence work early in 1955 of joining these two wharves together. On completion, a total Government wharfage length of about 350' will be available for commercial and other shipping.

Fresh water is not available to shipping in Kuala Belait and vessels using this port obtain supplies of fresh water from Brunei, Miri or Labuan.

Fuel oil is obtainable in 44 gallon drums, and a limited supply of fresh and dry provisions are available. There are two cranes on the Company's wharf, one of which has a lifting capacity of 20 tons.

In the latter half of the year a ten ton Mobile crane was provided for use on the Government wharves and made available for private hire.

A number of Straits Steamship coaster type vessels ply regularly between Kuala Belait and Labuan, and this service was augmented by a weekly schedule of Straits Steamship Co.'s vessels of approximately 1,350 G.R.T. These latter vessels, however, cannot cross the bar to enter Kuala Belait and cargo is discharged into lighters while at anchor in Kuala Belait roads.

The bulk of cargo unloaded at this port is consigned to the British Malayan Petroleum Co. Ltd., and is carried on their fleet of L.C.T.'s.

A considerable number of native craft operate from Kuala Belait and carry local produce and merchandise up and down the Belait river and on short coastal voyages. The number of these craft licensed during 1954 are as follows, 1953 figures are also given for comparison:—

			1953	1954
Private	...	...	60	43
Cargo	...	...	15	18
Passenger	...	...	17	21
Total			<hr/> 92	<hr/> 82

Tutong:

Tutong, situated on the Northern bank of the Tutong river about 8 miles from the entrance.

Facilities— As the Tutong river is navigable by small native craft and very light launches only, no facilities are provided for shipping at Tutong village. The village, which is on the main road between Brunei Town and the Oilfields, possess a 20' long wooden wharf and is used mainly by outboards and native craft which ply between Tutong and the upper reaches of Tutong river. Small craft licensed in Tutong during 1954 are as follows:—

			1953	1954
Private	...	...	42	32
Passenger	...	...	5	3

Muara: (Brooketon)

Muara (Brooketon), situated on the western shore of Muara harbour.

Facilities— A small wooden pier with a depth of 7' alongside exists at Muara, and the harbour provides a completely sheltered anchorage in depths of from 3 to 8½ fathoms. The pier is mainly used by fishing perahus and small local landing craft and is not provided with fresh water for shipping.

Fuel and oil are not available in Muara, but small quantities of dry provision may be obtained in the bazaar.

A small private concern operating as the "Muara Slipway & Repairing Co." obtained permission to rebuild the former Government slipway in Muara which succumbed the ravages of time and hard work in 1952 and was abandoned by Government. A workshop, with lathes and fitters bench etc., was built adjacent to the slipway and opened for business early in the year. Engine repairs and overhauls and repairs to wooden and steel hulls of up to 150 ton dead weight are now available in Muara.

Brunei Town:

Brunei Town, situated about 9 miles up river from the Inner bar where the Brunei river enters Brunei bay.

Facilities— A 400' reinforced concrete wharf now exists in Brunei Town.

Fresh water is available for shipping from 5 water points along this wharf, but only a limited supply of fuel oil can be obtained in Town at present.

Fresh and dry provisions are obtainable, also minor engine repairs may be effected. Shipping requiring lifts of over 10 tons have to rely on their own derricks.

A shuttle service continues to be operated by Straits Steamship Co.'s coaster type vessels between Labuan and Brunei and other ports in Brunei bay. A large proportion of the bulk of general cargo, formerly handled by these vessels after transshipment in Labuan, is now, however, brought direct to Brunei by the new weekly scheduled Singapore/Brunei service aforementioned under Kuala Belait.

The total tonnage of cargo carrying shipping handled alongside Brunei Town quay during the year, again shows a considerable increase on figures for the previous year:—

	1953	1954
Total	100,476 N.R.T.	122,237 N.R.T.

This increase is largely due to additional scheduled services, and the more frequent use of the port by unscheduled vessels, and does not include native owned launches, tongkangs and outboard motor vessels which operate a coastal trade in local produce and livestock between Brunei and neighbouring ports and places up the many water-ways and rivers around Brunei Bay.

The State operates a thrice weekly motor launch service between Brunei Town and Labuan, carrying inward and outward bound mail and passengers and connecting as far as possible with scheduled air and steamer services. This service which operates in all weathers includes the crossing of Brunei Bay and entails a return trip of 70 miles. As in the previous year, an unbroken schedule was maintained in 1954, and a total of 78 special trips were made to Labuan in addition to the scheduled thrice weekly service. No additions were made to the State fleet during the year, the largest vessel of which is an 80' twin screw, sea going, mail and passenger launch.

Other vessels operated by Government on the many duties of a State whose main inland transport and communications are by water, consist of:—

- One 65' fast twin screw inspection launch
- One 45' twin screw mail and passenger launch
- One 35' single screw river launch
- One 65' single screw barge
- Two 35' single screw work-boats
- One twin screw vehicle ferry.

In addition to the above some 16 thirty two foot .25 H.P. outboard motor launches are engaged in providing fast transport and services in the shallow up river reaches of Brunei water ways where larger vessels cannot navigate.

The total number of passengers carried to and from Brunei Town during the year are given below with 1953 figures for comparison:—

		1953	1954
Inward	... ..	12,018	13,238
Outward	... ..	10,601	11,565

These figures again show an increase on the previous year. However, passenger traffic which reached its peak early in the last quarter than began to decline as a result of the new weekly service by Straits Steamship Company's vessels, and the Feeder Air Service.

On completion of the ferry landing stages at Kuala Tutong and Danau on the main road between Brunei and the Oilfields, V. F. "Higgins" the new twin screw vehicle ferry, was put into operation early in the year and proved to be a great improvement on the towed pontoon ferries which was formerly the main link between the North and South ends of the State.

Large ocean going ships cannot enter any of the ports in the State of Brunei, but vessels of up to 4,000 G.R.T. regularly use a good sheltered anchorage off the Island of Baru Baru (approximately 2 miles East from the entrance to Brunei River) and there, without difficulty and in perfect safety, load such cargo as timber and firewood from barges and lighters.

Vessels of up to 1,700 G.R.T. do however, got up to Brunei Town by working the tides across the bar, where at M.L.W.S. they are limited to a draft of 7'.

The Brunei inner bar which forms the chief obstacle in the approach to Brunei, extends from Kiangaran Spit (an island on the Starboard hand close to the mainland) to Pulau Chermin, a small island on the port hand, thus lying almost right across the river mouth.

The Barrier, lying about one cable further up-stream forms another obstruction. This is an ancient construction of rocks, boulders, and coral cemented together throughout the years by marine growths, and dated back probably about 300 years. A recent survey of this Barrier and approaches to Sungei Brunei gave a depth of not more than 4' on top of the Barrier at M.L.W.S.

The removal of coral and stone from this Barrier for road-making purposes, has now ceased, the depth of 4' is likely to remain constant. At the southern end of the Barrier, a greatest depth of 71' is obtained in a remarkable hole which extends across the channel.

Lights:

Construction of reinforced concrete stands and beacons for the Brunei river lighting scheme was completed in December, and delivery from United Kingdom is now awaited of the lights themselves which will be installed and put into operation early in 1955.

These lights will provide mariners with much needed aids to navigate the winding and dangerous Brunei river during the dark hours, and should result in a great saving of valuable time at present spent at anchor waiting for daylight.

Beacons:

At the request of various interested concerns during the year the Limbang channel was marked with red and white beacons. These beacons, numbering nine in all, consist of iron posts surmounted by square boards painted red on the shoal side and white on the safe side and provide valuable day marks for mariners attempting this rather difficult channel.

AIR

Air communication both within the State and externally has improved tremendously during 1954. Malayan Airways Limited extended their North Borneo Feeder Service during the year to include the two airfields in this State—Brunei and Anduki, thus giving an air connection with Labuan which connects with the air services to North Borneo, Sarawak, Singapore, Hong Kong, Manila and Australia. The planes were heavily booked and there is every indication that more or larger aircraft will be required.

Brunei Airport:

Construction of the airport at Berakas 3 miles from Brunei was commenced during the latter half of 1953, but little progress was made until after the wet season. The field for use by the

Rapide aircraft of the Malayan Airways Limited feeder service was completed by September, and until November 14th there had been three test landings by these aircraft, and three landings by Auster Aircraft.

The scheduled feeder service operated by Malayan Airways Ltd. came into operation on November 15th when the airfield was officially opened by His Highness the Sultan, and from then until the end of the year the service consisted of flights from Labuan through Brunei Airport to Anduki and Lutong (Sarawak), and in the reverse direction. There was a Northbound and Southbound service each day except Monday when it was Southbound only, Saturday when it was Northbound only and Sunday when there was no service.

The metalled surface runway completed for the use of the Rapide Aircraft was of 800 yards length and 50 feet width with two 50 feet wide side verges and adequate over-runs. On completion of this strip construction continued on the airfield in order to provide a tarmac surfaced runway 1,500 yards long and 150 feet wide with two 75 feet wide side verges and overruns 200 feet long at each end. This airfield which it is hoped to complete by the end of 1955 will be suitable for use by the Dakota aircraft of Malayan airways international flights.

The preparation of the 800 yards long runway involved approximately 43,000 cubic yards of fill which was taken from nearby hills, in order to build up the level of the runway. After filling and compaction approximately 4,650 cubic yards of stone was used to form the surface of the runway. By the end of 1954 a total of 80,000 cubic yards of filling had been completed. It is estimated that a further 135,000 cubic yards of filling will be required to complete the strip for use by Dakota aircraft.

Temporary control tower and terminal buildings were constructed during the year, and an electrical generating set was installed. VHF ground air and HF point to point radio was installed, and a radio beacon is on order. A Pyrene airfield crash trailer with Landrover was provided which delivers 200 gallons of water and 14 gallons of foam. A larger self propelled tender is on order.

Anduki Airport:

The British Malayan Petroleum Company Ltd. continued to maintain their grass airfield at Anduki at its usual high standard, and by agreeing to allow the Feeder Service to use this, made a valuable service available to the public. In order to assist them an Air Traffic Control Assistant was loaned temporarily from Brunei.

The only other method of air communication in the State is by sea-planes which can land in the Brunei and Belait rivers. The B.M.P. Co. have purchased a Sealand Amphibian aircraft which is based at Anduki, but which makes occasional trips to Brunei, landing in the river there just below the Residency.

ROADS

Apart from the road between Brunei and Kuala Belait most of the internal communication in the State is by river transport. One of the main features of the Development Plan for Brunei State is the construction of an adequate road system which will make travel safer and faster, and also will open up valuable areas for forestry and agricultural operations. During 1954 funds were approved by the State Council for the first three years of the roads programme. With the equipment which began to arrive in 1954, and the anticipated arrival of roads engineers and technical assistants early in 1955 it is hoped to make good progress on roadworks in the near future.

The roads programme for the first three years of the Development Plan consists of reconstruction of the existing roads to Bera-kas, Muara, Jerudong and Tutong, and the building of a new road from Danau ferry to Seria. Consideration is also being given to the construction of a bridge at the mouth of the Tutong River, which will replace the existing ferry. When this programme is completed communication between the two main areas of the State will be very much speeded up.

The approximate mileage of different types of roads in the State at present is as follows:—

(i) All weather bitumen or concrete surfaced roads	...	...	...	...	75.51 miles
(ii) Metalled roads	...	...	...	...	14.44 miles
(iii) Earth roads	...	...	...	...	71.63 miles
(iv) Bridle Paths	...	...	...	...	74.80 miles

Total 237.38 miles

Of this total mileage approximately 67 miles were built and are maintained by the B.M.P. Co.

Brunei Town Roads:

Considerable delay was experienced in the formation of the roads in the shophouse area of the town as it was necessary for the contractor building the shophouses to store his construction materials on the roadway. Several roads had been resited through the old shophouses, and these had to await demolition of the old shophouses which in turn awaited the completion of the new shophouses.

A number of new earth roads were formed to give access to buildings under construction, the total length being 2.24 miles and the average width 21 feet. In the town area road verges were widened an average width of 7 feet for 0.52 mile, and metalled roads were widened an average width of 5 feet for 0.79 mile. Earth roads averaging 20 feet width were metalled for a length of 1.76 miles, and existing roads averaging 21 feet width were re-blocked for a length of 1.06 miles. New grouting was done only in a few places because of the shortage of crushed stone, and also because many of the roads had to be given time to settle. A length of 6 chains of road 21 feet in width was grouted. Concrete roads 15'-6" wide and approximately $\frac{1}{2}$ mile length were constructed during the year thus completing the backlanes in the shophouse area.

Towards the end of the year experiments were made on several short lengths of road with soil cement stabilization, but it is too early to say how successful these experiments have been. It is hoped that this method of preparing road bases may be a solution to the shortage of suitable stone in parts of the State.

A total length of 2.3 miles of concrete drains along roads in the Town area and Government housing areas. This has greatly improved the efficiency of the drainage in these areas. Six culverts were laid beneath new roads during the year and three old culverts were completely renewed. One reinforced concrete bridge of 20 feet span capable of carrying heavy vehicles was constructed across Sungei Tasek to give access to the new P.W.D. area, and one 20 feet span timber bridge was built over the deviation of

Sungei Berangan. The Clifford bridge was successfully braced early in the year to stop sidesway and towards the end of the year guniting was being done to cover up exposed steel reinforcement.

Kuala Belait Town Roads:

Progress on the roads in this area was improved during 1954. Filling to bring the roads to the desired formation level was carried out on a number of roads for total length of 4.75 miles. Road metalling and grouting was done for 2.85 miles on town roads 20 feet wide, and for 0.50 mile on access roads 9 feet wide. 25,000 square yards of grouted roads were treated with a sealing coat blinded with $\frac{1}{2}$ " granite chippings. Six concrete sidelanes 600 feet long and 8 feet wide were constructed in the shophouse area.

Nine thousand five hundred feet of reinforced concrete drains have been constructed mostly in the Kuala Belait shophouse area. This has greatly improved the drainage of the area. Two thousand three hundred pieces of precast reinforced concrete inverts 4 feet long and 4 to 5 feet deep have been made for use on the Kampong China main drain.

Tutong Road 33 $\frac{1}{4}$ miles:

The road from Brunei to Tutong beach is at present an all weather road, the width of the carriageway varying from 21 feet over several miles down to 8 feet over about 15 miles the remainder being 12 feet wide. Work is in progress to widen the road to 21 feet carriageway, at the same time easing the gradient and alignment, and although better progress was made in 1954 a great deal still remains to be done. With the increased amount of roadmaking equipment now received it is expected that better progress will be made in 1955.

During 1954 the road was generally widened from mile $\frac{3}{4}$ to mile 7 to a width of 40 feet between drains, and on the remainder of the road a total length of 3 miles was similarly widened mostly on corners and hill slopes. Deviations to give better gradient and alignment were made at mile 4 and mile 16 and another at mile 14 $\frac{1}{2}$ was began towards the end of the year. The entire section between mile $\frac{3}{4}$ and mile 2 $\frac{1}{4}$ was regraded and reblocked and similar work is now being carried out from mile 2 $\frac{1}{4}$ to mile 2 $\frac{1}{2}$. At mile 13 $\frac{1}{4}$ the road was regraded and reblocked for a length of

3½ chains. Between mile ¾ and mile 7, 23,000 cubic yards of block coral base course 8" thick was completed and over the remainder of the road approximately 10,000 cubic yards of base course was laid.

Grouting was not carried out on a large scale because of the scarcity of crushed stone, but between Brunei and mile 7 approximately 7,200 square yards of road surface was treated. Over the remainder of the road approximately 2,700 square yards of road surface was grouted mostly on new approaches to bridges and on hill slopes.

New guide posts to aid night traffic were made and fixed along the road. Of the 1,216 posts made 739 were fixed during the year and further work is in progress.

The existing timber decked bridges at mile 3 and mile 19½ were rebuilt with concrete beams and decking; and a contract has been let for the construction of a new concrete bridge at mile 26. Almost all of the culverts between Brunei and mile 7 were extended as the road was widened, and two culverts were completely renewed. A total length of approximately 500 feet of new culverts was laid over the whole length of the road. New drains were made whenever the road was widened and outlets were periodically cleared and kept flowing. Various rivers were cleared of all timber and corners eased both upstream and downstream of the road for a total length of 4.76 miles.

Berakas Road (9 miles):

Towards the end of 1953 reconstruction of this road was started in order to give good access to the quarry at Berakas beach. The old road which varied from 25 feet to 30 feet between drains is to be widened to a 20 feet wide carriageway with 10 feet wide verges on each side. The laying of base course in Berakas gravel was completed during the year, leaving surfacing to be done in 1955.

In the initial stages approximately 30,000 cubic yards of sand and stone mixture from the Berakas deposits was laid along the worst parts of the road in order to make the road passable in all weather. On completion of this a thickness of 4 inches of sand and stone mixture was spread along the road formation for approxi-

mately $\frac{3}{4}$ of the length of the road. This has now been compacted and is forming a very satisfactory base. Approximately 40,000 cubic yards of sand and stone mixture was used in the preparation of the base course.

An 18 feet wide reinforced concrete bridge was constructed to replace the old timber bridge over Sungei Berakas. The portion of the road near this bridge was subject to flooding after heavy rains but this was overcome by clearing the river both upstream and downstream of the bridge for a total length of 200 chains. Outlets from the roadside drains were practically non-existent when work was commenced and it was necessary to excavate or widen approximately 6 miles of outlets in order to allow the water to escape to neighbouring streams. Approximately 10 miles of new roadside drains were excavated, and 3 miles of the old roadside drains were widened deepened and regraded.

Muara Road: (Berakas Road to Muara 12 miles)

The road to Muara from Berakas road is an earth road of reasonably wide formation except on the hill slopes, where in the past it was necessarily left narrow because of the lack of suitable earth-moving equipment. Early in 1955 construction of the all weather surfaced road will commence.

During the first 9 months of 1954 a certain amount of earthwork was done in widening and regrading and in the excavation of drains, but as this was all done by hand, work was necessarily slow. In October work was commenced on widening and regrading of the road using modern earthmoving equipment. The road was widened for approximately 1 mile and the gradient of several small hills was reduced, but work was stopped by the heavy rains which made the road impassable for several months. In order to enable the road to be kept open for the remainder of the wet season approximately two miles of corduroy was laid.

A new concrete bridge of 18 feet span was constructed at mile 2 $\frac{1}{2}$. Approximately 2 miles of new drains were excavated and all existing drains were maintained satisfactorily. The road leading to the High Commissioner's Lodge at Muara was realigned and widened, and in the same area a new earth road leading to the water tank was constructed.



M.V. *Perlis*,
Straits Steamship
alongside Brunei
wharf.



Jerudong Road:

This road leading from Mile 10½ Tutong Road to the Jerudong beach is an earth road of wide formation and easy gradient. During the year the road was completely graded and all corners eased. The main trouble was the slipping of the sides of cuttings caused by heavy rains, but these were promptly dealt with and the road was kept open throughout the year.

Kuala Abang Road:

This road from Mile 18 Tutong Road to Kuala Abang is suitable only for vehicles with 4 wheel drive, as it passes through some very swampy country. The first mile of road leading to the Agricultural Station at Birau is quite good but after that the road deteriorates rapidly. Work on this road during 1954 was necessarily slow because of the lack of earth-moving machinery, but quite a considerable amount of work was carried out by hand. Eventually the inland road to Kuala Belait and Seria will follow the existing road but it will probably be some time before work on this route is started, as priority is being given to the coastal route.

Remetalling and grouting of the road up to mile 1 was carried out over a length of 30 chains, an area of approximately 1,300 square yards. Timber bridges replacing old ones were built at miles 1½, 3 and 5, and two new culverts were laid and two others were extended. The road was extended for a distance of 9 chains, and a new rentis was cut for a distance of 5 miles and 51 chains following the formation of the old Japanese road towards Rambai on the Tutong River.

Limbang Road:

An earth road from the south side of the Brunei river connects Brunei to Limbang in Sarawak, but this road is very seldom used for vehicular traffic. The road is narrow and quite steep in parts while in other places, particularly beyond the Brunei border it passes through very bad swamp. The only work done on this road during the year was maintenance to keep the road in order for the occasional Government traffic using it.

Bangar Pandaruan Road:

This road in the Temburong District is not used by vehicles but is used a great deal for pedestrian and cycle traffic. During

1954, 18 temporary bridges 10 feet wide suitable for cycle and jeep traffic were built along this road. Routine maintenance of drains was also done but no major road-works were carried out.

Bridle Paths:

All existing bridle paths were maintained satisfactorily during the year and the following new paths formed:—

Mile 8 Tutong Road to Mata Mata	...	4 miles 23 chains
Mata Mata to Gadong	... ..	1 mile 8 chains
Kiarong area	... ..	78 chains
Pengkalan Batu to Kampong Lura	... ..	1 mile 20 chains
Buang Sakai to Kampong Tanjong Pisang	... ..	1 mile 3 chains
Bang Nokat to Bukit Sulang	... ..	53 chains
Kota Batu	... ..	17 chains
Total		9 miles 42 chains

The bridle path from Bangar to Batu Apoi was raised over swampy sections and is now usable in wet weather. The path from Mile 5½ Tutong Road was widened by 6 feet making it 12 feet wide and passable for light vehicular traffic.

POST OFFICES

There are six Post Offices in Brunei State, situated in Brunei Town, Tutong, Bangar (Temburong District), Kuala Belait, Seria and Muara. Mails to and from these places are usually conveyed by bus and launch.

Prior to 15th November this year there was a thrice weekly Air Mail service between Singapore and Labuan in addition to weekly surface mails. A Government launch connects with the mail planes and brings both air and surface mails for Brunei Town, Tutong, Bangar and Muara.

Air mail for Kuala Belait and Seria is carried on a B.M.P. Co. plane from Labuan by special arrangement with the Company. With the introduction of the Malayan Feeder Airways Service in November the air mail service is extended to five times weekly. The internal mails to and from Brunei Town, Kuala Belait and Seria are also being conveyed by air.

The total number of postal Articles dealt with during the year was 1,420,304, compared with 1,031,907 in 1953, and 772,482 in 1952.

TELECOMMUNICATIONS

A direct radio telegraph service is maintained between Brunei and Singapore, and also with Kuala Belait, Seria and Temburong within the State, Jesselton and Labuan in North Borneo, and Kuching, Miri, and Limbang in Sarawak. The first materials for the single channel VHF radio telephone system arrived in mid 1954 and good progress has been made with its erection and installation.

The B.M.P. Co. operate an automatic telephone system in Seria but in Brunei and Kuala Belait magneto system is used. Connection with the B.M.P. Co. system is possible through a small automagnetic switchboard in Kuala Belait. Orders were placed in the latter part of 1954 for automatic telephone exchanges and underground cables for Brunei and Kuala Belait.

Mr. M. Steele an Officer on secondment from the Department of Posts and Telegraphs Sarawak arrived for duty in Brunei in November.

Chapter XII.

PRESS, BROADCASTING, FILMS AND GOVERNMENT INFORMATION SERVICES

Press:

THERE are three newspapers published in the State: **THE BORNEO BULLETIN**, and two **SALAM** newspapers, one in English and the other in Romanised Malay. The first is an independent commercial newspaper, published and printed by the Brunei Press in Kuala Belait.

The other two are staff newspapers, published by the Information Department of the British Malayan Petroleum Company Limited, Seria, for their workers; and also printed at the Brunei Press.

They are issued every Saturday morning. **THE BORNEO BULLETIN** is selling at 20 cents each, and has a circulation of 5,500 copies, which is by a considerable margin; the largest circulation of any commercial newspaper in British Borneo, daily or weekly. A wide coverage is given to Borneo affairs, with special reference to Brunei.

The **SALAM** newspapers are circulated free to the staff of the oil company. Apart from this they are also popular amongst outside readers too; and there have been requests from all over Borneo and Malaya for permission to receive the English and Malay copies of its private newspapers, and wherever possible these have been met.

The Romanised Malay edition of **SALAM** is the only Malay language newspaper at present published in Brunei. Its circulation has risen to about 4,800 copies.

Whilst the Malay edition concentrates more on current public news, the English edition is really the liaison medium between the oil company and the workers. It carries the operation news, information and relevant notices of the company. This edition has a circulation of about 3,750.

From time to time the Government, through the Government of Brunei Information Service, issued Press Releases, and photographs to these newspapers.

The popularity of these papers has spread even amongst local Government schools, as part of their teaching media.

The Brunei Press, a private printing press which was established at Kuala Belait in October, 1953, expanded in size very considerably during 1954. The press started business with an adequate selection of modern machinery; but during 1953 the proprietors followed a policy of duplicating every machine to guard against production interruptions owing to breakdowns and delays in obtaining spare parts and expert mechanical assistance from outside Borneo.

It operates a selection of automatic printing machines covering a wide range of sizes, mechanical type-setting machines, and various paper-finishing equipment.

Throughout the year the Press continued to employ local people on a basis of one local for one skilled expatriate; and some progress was made in the training of local youths in the mechanical processes of printing. All bindery operations at the Press are carried out by Brunei women and girls, under the supervision of a skilled foreman from Singapore. These local women have attained a satisfactory degree of skill.

The Press notified Government during 1953/54 of its willingness to accept State-sponsored apprentices for training as printers, and this question is under consideration.

It has also acquired a small lithographic printing machine during the early part of last year, the first of its type in British Borneo; and the first introduction of lithographic printing in the area. Its first job was to print the music of the Brunei National Anthem.

The SALAM pioneered during 1954 an important technical advance in Borneo printing—the adaptation to local needs of two processes which enable them to print their own pictures at short notice by photo-lithographic methods. Although the pro-

cess is not new, their method of combination is a fairly important advance in the facilities available to newspapers and printers who operate relatively far from full process-plant equipment.

Broadcasting:

There are no broadcasting services in the State of Brunei; but a preliminary consideration was given during the year to the establishment of a broadcasting station, using medium-wave and short-wave transmitters.

Provision for broadcasting is included in the State's Five Year Development Plan, but the preoccupation with more urgent priorities has prohibited action on this scheme up to the present.

However, at the end of the year, the State Council voted funds for the visit of a Consultant to advise on the frequency and power of the transmitters to be installed and it is hoped that it will be possible to produce a scheme for broadcasting in the State of Brunei early in the next year.

Films:

There is no commercial motion picture production company in the State.

The Government of Brunei Information Service, is the only organization that takes motion pictures of local events for showing to the public. These films are of the silent 16mm type; and at this stage the quality of presentation is still in its infancy.

The Information Department has two 16mm cinecameras, of which one is newly acquired; but it has no facilities for sound recording.

After filming, the exposed cine films are usually sent to Singapore or the United Kingdom for processing; and when returned they are then used in conjunction with the free Government film shows conducted by the Information Department throughout the State. Because of their size, it is not possible to have them shown by the local commercial cinemas, which use 35mm motion picture projectors.

The films taken in 1954 were: First Proving Flight Landing at Brakas Airport—400 feet, in Kodacolor; Istiadat Bertindik—1,200 feet, in Kodacolor; Prophet Mohamed's Birthday Celebra-

tion 1954—200 feet, in Black and White; and His Highness the Sultan's Birthday Celebration 1954—1,600 feet, in Kodacolor.

The films taken locally, have proved their popularity and good attraction amongst local audiences, because of the local colour and character.

Commercial Cinemas— Altogether there are five operating cinemas in the whole State: 2 in Brunei Town, 2 in Seria and 1 in Kuala Belait. The one in Tutong which was operating last year, is now defunct.

Of the five mentioned, one of the two in Seria is built as an "open-air" theatre. This exception belongs to the oil company. But at the time of writing the British Malayan Petroleum Company, Limited, is completing a new cinema building, which will be opened early in January, 1955.

All the cinemas are equipped with 35mm dual sound projectors. Improvements to local cinemas are steadily being made, and now at least one cinema in Brunei Town has been able to screen Cinemascope films, using extra wide and curved screen.

Information Services:

1. *Staff*— This Department has a staff of 1 State Information Officer; 1 Assistant Information Officer; 2 Grade B Clerks (1 vacant); 2 Grade A Clerks; 6 Cinema Projectionists; 2 Peons; 2 Caretakers; and 1 Driver.

The appointment of State Information Officer, is a new one. It was filled in September this year, by an officer from overseas, on a three-year contract. Until this date the Department was under the Assistant Resident, Brunei.

The Assistant Information Officer, Pengiran Mohd. Yusoff bin Pengiran Haji Abdul Rahim, was awarded a scholarship to the United Kingdom, and is now on a year's course in Public and Social Administration at the South Devon Technical College, Torquay, Devon, England. He left for the United Kingdom on 27th September this year, and will be expected to complete the course by about the same time next year.

Provisions for an Editor, an Assistant Information Officer, and a Photographer, for 1955, have already been approved.

This Department has no special assistant who could be responsible for the general routine administration procedures. This task is now performed by the State Information Officer, in addition to his normal responsibilities.

The composition of the abovementioned staff includes that of the Brunei Town Head Office, as well as the one branch in Kuala Belait, which has 2 Projectionists, 1 Caretaker and 1 Peon.

2. *Film Shows*— The free film shows operated by the Information Department extend to all the districts in the State: Brunei Town, Temburong, Tutong, Muara, Belait and Seria. These shows are carried out by the mobile cinema units that are based at Brunei Town Headquarters, and at Kuala Belait branch.

The volume of performances for the year was somewhat curbed by the defection for several months of two of the electric generators used to operate the projection equipment. Many of the normal requests for film shows from rural places without electric supply had to be refused. The other reason that has proved to be an unsurmountable obstacle is the rain, that usually renders the roads leading to such places unusable: these result in the cancellations of the above shows.

The Department gave 197 film shows all over the State during the year, to an estimated audience of 63,665 people; and 1,601 reels of films were seen.

Apart from the film shows operated by the mobile cinema units to remote villages etc., shows were also conducted for special occasions at the Head Office Theatre.

The general reaction on these showings have been encouraging; and especially the rural folk look upon them with favourable anticipation.

Film shows are put up on request from responsible leaders of schools, public organizations, and various organized groups, for the purpose of education and information. This method gives more scope for mutual co-operation and understanding with the group sponsoring the show, and create better interest and appreciation.

3. *Films Library*— The Films Library is still very small, and most of the films are of the news documentary type. Films from the Malayan Film Unit have been very useful locally because they contain materials of similar local colour and character; also, they are available in the Malay language commentary which is very popular amongst the public audience. British News from the Central Office of Information, London, help a great deal to give local audience the current world news. Other sources of supply have been the United States Information Service, Singapore, and Shell Films Service Library, Singapore.

A new system of proper indexing of the films is being introduced, to improve the existing one. More educational films will be bought next year to augment the present one.

4. *Reading Room*— There are two Reading Rooms operated by the Information Department: one in Brunei Town Head Office, and the other at Kuala Belait branch office.

These Reading Rooms are open every day from 2 p.m. until 9 p.m., except Sundays and Holidays. Visitors comprise all nationalities.

5. *Photography*— From time to time the Department takes still photos, and motion pictures (see under Films). They are distributed to the press whenever they are of importance; whilst others are used for public information with suitable captions put up in the Reading Rooms.

Due to the absence of a full time photographer, the volume of work done in this direction has been limited. It is hoped that this position will improve when the appointment of a photographer is filled next year. The installation of a Dark Room will also be considered.

6. *Public Address System*— As usual the Public Address equipment of the Department served the requirements on various occasions. The mobile cinema van which is equipped with such a system rendered valuable services, in addition to the above, to broadcast public information and notices around the town and kampongs.

PART III.

Chapter I.

GEOGRAPHY

BRUNEI is a State on the north-west coast of Borneo, lying between latitude $4^{\circ} 2''$ and $5^{\circ} 3''$ north and longitude $114^{\circ} 4''$ and $115^{\circ} 22''$ east. It forms two enclaves into the territory of Sarawak, by which it is bounded on all sides, or perhaps it would be more correct to say, historically speaking, than an intrusion of Sarawak formed by the basin of the Limbang river splits the State into separate parts. It comprises of an area of some 2,226 square miles, and has a coast line of about one hundred miles extending from Brunei Bay in the East to the boundary with Sarawak in the West.

The capital of the same name, or to give it its honorific Arabic title, Daru'l Salam (Abode of Peace) is situated on the Brunei River, about nine miles from its mouth and is distant by sea 759 nautical miles from Singapore. At the time of the last census in 1947 it had a population of 10,620. Prior to 1910 the town consisted entirely of Malay houses built on nibong piles on mud flats on the river, but it has now spread over a portion of the mainland, partly reclaimed, on which the Government offices and other public buildings and streets of shophouses have been built.

Set in a wide sweep of the river, this river town is in its way unique. At high tide under favourable conditions of light it takes on a quite remarkable beauty; viewed at close quarters it is even more remarkably ramshackle. The houses are grouped together in small villages, many being connected by precarious bridges, and there the inhabitants carry on their multifarious activities in much the same way as if they were on land. The only other town of any size is Kuala Belait at the south-western end of the State's sea-board with a population of about 5,000. In the Seria area, which is the centre of a rapidly expanding oil producing district and the local headquarters of the British Malayan

Petroleum Company, the population is approximately 12,000. At Kuala Belait with municipal services, piped water supply, electric light, domestic gas, cold storage, cinemas and other amenities, it is difficult to realise that within living memory it has been the scene of human sacrifices and that only two hours up river there are pagan tribes treasuring the grisly relics of head-hunting expeditions of not so long ago.

Climate:

The climate is of the tropical type and is characterised by uniform temperature, high humidity and copious rainfall. The heat is usually tempered by a slight breeze and the temperature rarely exceeds 90°F; the usual daily range is between 76° and 86°F.

The annual rainfall varies from 100 inches at the coast to over 200 inches in certain parts of the interior. There are no well defined seasons, but the rainfall tends to be heaviest from October to the middle of January during the period of the Northeast monsoon.

Local standard time is eight hours ahead of Greenwich time (meridian 120°E.). As the mean longitude of the State is roughly 115°E. there is a sort of natural daylight saving of about twenty minutes.

Chapter II.

HISTORY

THE native name for the island of Borneo has always been Pulau Kalimantan, but a Mercator's chart of 1595 gives to the town of Brunei as well as the whole island, the name of "Borneo". Early writers spell the name of the island variously, Brunei, Brunnai, Brune, Borneo, Borney, Bornei, Borne and Burni; from these variations upon the theme of one word, two words eventually crystallised—"Brunei" and "Borneo". As recently as 100 years ago, Brunei territory was always referred to as "Borneo Proper". The fact is that at the time of the earliest cartographers and writers, the kingdom of Brunei was at its zenith; the terms "Brunei" and "Borneo" were synonymous and the whole island was subject to the dominion of Brunei.

Brunei has no discovered pre-history and no established early history, and the meagre written records do not go further back than the first Mohammedan Sultan, contemporaneous with the introduction of the Arabic script in or about the fifteenth century. For records of the pre-Muslim era we have to turn to Hindu and Chinese chroniclers. Chinese annals of the sixth and seventh centuries contain reference to a kingdom known as Poli or Puni which sent tribute to the Emperors of China in A.D. 518, 523 and 616. Similar references to a state of that name 45 days' sail from Java occur in the annals of the Sung dynasty which ruled over South China from about 960 to 1280 A.D., and there are strong grounds for identifying it with Brunei, though the authorities are not unanimous on this point. With the decline of the Sung dynasty Brunei transferred its allegiance to Hindu Majapahit in Java, then back again to China, and finally at the end of the fourteenth century, paid tribute to Mohammedan Malacca. With the coming of the Ming Emperors the ties with vassal states were strengthened and tributes were sent to China several times between 1405 and 1425. Thereafter there is no record.

Brunei must soon have thrown off all allegiance for by the early years of the sixteenth century it had risen to great power,

and one of its rulers, Sultan Bulkiah, or Nakhoda Ragam (the Singing Captain) a renowned sea rover, voyaged to Java and Malacca and made conquests in Borneo, the Philippines and Sulu and even seized Manila. The names of many islands scattered throughout the archipelago are alleged to commemorate the circumstances of his voyages. One legend is that he set out on a cruise with a gantang of pepper seeds and was not content to return until he had given to each seed the name of one of the myriad islands encountered. His wife was a Javanese princess whose followers intermarried with the people of Brunei, and such, according to one tradition, is the origin of the Kedayans whom custom associates with the main bodyguard of the Sultan and who introduced in Brunei a system of rice cultivation greatly superior to local standards. It is related that in his declining years he carried with him on his exploits a band of artisans whose duty it was to prepare royal tombs in remote parts of the archipelago, it being his wish should he die at sea to be buried at the nearest site, the finest of these is said to contain his remains at Kota Batu, about $1\frac{1}{2}$ miles downstream from Brunei Town. This tomb of exquisite workmanship in hard basaltic stone was damaged by Spanish round shot in the seventeenth century and is now in a sorry state of dilapidation and the engravings upon it remain a secret to posterity.

This was the golden age of Brunei. Her sovereignty extended over the whole island of Borneo, the sultanates of Sambas, Pontianak, Banjarmasin, Pasir Kotei and Bolongan being her vassals, as well as over the Sulu archipelago and over the islands of Balabac, Banggi, Balambagan and Palawan.

It was probably during the lifetime of Sultan Bulkiah that Pigafetta, the Italian historian of Magellan's voyage around the world, visited Brunei and wrote the first eye-witness account in which he bore evidence as to the splendour of the Court and the size of the town of Brunei, the population of which he estimated at 25,000 families.

Kublai Khan, the Mongol Conqueror, is known to have sent an expedition from China to the eastern archipelago in 1292 and it is more than probable that this was the origin of the Chinese colony in northern Borneo which is commemorated in the nomen-

clature of Kinabatangan river and the mountain Kinabalu and which according to tradition provided Brunei with an early ruler.

In 1291, according to Marco Polo there was a considerable junk carried trade between Brunei and China.

In Brunei, the traditional ceremony, the royal procedure and the nomenclature of officers of State, all commemorate Hindu and Chinese influences. The Hindu influence emanated from the Empire of Majapahit in Java and according to Javanese records a force expelled Sulu marauders from Brunei in 1368 and Brunei is mentioned as one of the countries conquered during the reign of the Angka Wijaya who was the last king to reign over Majapahit before it was vanquished by Mohammedan Malacca.

The Portuguese visited Brunei in 1526 and confirmed the glowing account of Pigafetta. Further visits were paid by the Portuguese until 1530, and a trading factory and a Catholic mission were established at the beginning of the next century. Spain, too, having possession of the Philippines, evinced an active interest in Brunei affairs and twice attacked the capital. Later the English and Dutch in turn made sporadic appearance.

Towards the end of the sixteenth century the power of Brunei began to decline and the outlying territories gradually fall away. The Dutch, having established trading stations on the Southwest, South and East of Borneo rapidly extended their sphere of influence over the semi-independent but nominally vassal sultanates. This disintegration continued until by the beginning of the nineteenth century the Kingdom of Brunei had so dwindled in extent as to include only what is now Sarawak and part of North Borneo.

At this period the capital itself seems to have degenerated to the condition of a slave market for the sale of captives of Illanun and Sulu pirates. Anarchy was rife in the outlying districts and in 1841, in return for his services in assisting the Bendahara Raja Muda Hashim, Viceroy of Sarawak, to quell an insurrection at Kuching, Sarawak proper was ceded to Mr. James (later Sir James) Brooke, who was proclaimed Rajah of Sarawak. In 1846 the island of Labuan was ceded to Great Britain as a base for anti-piracy measures and for the watering and careening of ships, and in 1877 the whole of the northern portion of Borneo was ceded to

form the nucleus of what was to become British North Borneo. At various later dates further cessions were made to the Rajah of Sarawak and to the British North Borneo Company till the territories of the State were eventually reduced to their present circumscribed limits.

In 1847 the Sultan entered into a treaty with Great Britain for the furtherance of commercial relations and the mutual suppression of piracy with an additional clause providing for extra-territorial jurisdiction over British subjects in Brunei, which provision was modified by the Agreement in 1856. By a further treaty made in 1888 Brunei was placed under the protection of Great Britain, and the Sultan agreed that the foreign relation of the State should be conducted by Her Britannic Majesty's Government. Provision was also made for the setting up of consular courts with jurisdiction over British subjects and foreign subjects enjoying British protection. In 1906 a supplementary agreement was entered into whereby the Sultan undertook to accept a British Officer to be styled Resident, who should be the agent and representative of the British Government under the High Commissioner for the Malay States.‡

The years between 1906 and 1941 were years of steady progress. Very shortly after the treaty a form of Government was set up under the Sultan in Council and the British Resident, and law and order was established. Roads were built, people were encouraged to become agriculturists and fishermen according to their way of life. Conditions of housing were improved and trade flourished. The discovery of a workable oilfield at Seria only 10 miles from Kuala Belait in 1929 gave added importance to the State and its revenue increased and Brunei became prosperous.

Period of Japanese Occupation:

In the early morning of 16th December, 1941, the first wave of Japanese Forces landed at Kuala Belait and occupied the oilfields at Seria. Six days later on 22nd December, Brunei Town was occupied and all the British Government Officials were interned. Almost immediately the Japanese introduced their East Asia Co-

‡The treaties and agreements relating to events described in this and the preceding paragraph were published as appendices to the Annual Report for 1946.

Prosperity policy, but it had a bad effect on the people's morale when public thrashing had to be attended and later the Japanese dropped that policy to a certain extent. People living near Kuala Belait were driven to work in the oilfields and the country folk were forcibly made to grow food.

Trade, of course, came to a standstill and only certain shopkeepers were allowed to remain as distributors. Luckily for the native population the Government in the years immediately preceding the outbreak of war had compelled traders to import large stocks of rice, the staple food, in case the European war disrupted shipping in the Far East. As a result of that policy the population had ample food for the first year and only slightly less in the second year, but by the end of 1943 the stocks had been used up and only a trickle of food was able to enter the country owing to Japanese shipping losses. Even the Japanese themselves lacked food, but not for long. As soon as the local harvest was in the majority of it was confiscated to feed the Japanese Forces and a serious state of starvation prevailed. Medicines were almost non-existent, malaria spread and the resistance of the population to disease was broken down.

The Japanese policy seems to have been one of neglect. No anti-malarial work was done and no maintenance of houses, roads, ditches or water transport was even contemplated.

In 1944 the Allied Air Force began to take an active interest in Brunei. There were almost daily raids somewhere in the State and later the main town areas were destroyed by bombing. All the shophouses were destroyed in Kuala Belait and Brunei Town and in the latter town the newly completed hospital with X-ray equipment was literally blown off the face of the earth. Luckily the famous River Kampong was spared but many houses have scars of machine gun bullets to bear witness to those frightful days. Most of the native population went into the interior to look for a piece of land to cultivate and live on until the coming of the Allied Forces.

Allied Re-Occupation:

On 10th June 1945, the Allied Forces landed at Muara and proceeded towards Brunei which they entered easily, having only encountered small activity. The Japanese in the meantime were

busily destroying their installations in setting fire to the oilfields at Seria. Realising that the end had come the Japanese took out all the civilians imprisoned for suspected anti-Japanese activities and executed them in their usual cowardly fashion. Their forces then moved up country and into the interior where many of them met untimely ends at the hands of the Dayaks.

Almost immediately a system of Government was set up under British control and so began the era of reconstruction under the British Military Administration. The population was found to be in a shocking state of health and it is no exaggeration to state that if the landing had not taken place when it did thousands of people would soon have perished through starvation and disease.

Free food and clothing were distributed as quickly as possible to the whole population and the sick were taken to hospital. Those Government servants who were still capable of work reported for duty and the gaps were filled by many wellknown members of the various communities.

Distribution of supplies was difficult because Japanese had allowed the roads to revert to jungle and grass was growing on many of the roads in the town area. Water transport was scrapped together from old hulls and Japanese engines were put into them. Rubble had to be cleared away in the town, bombcrafters filled in and roads rehabilitated.

Temporary shophouses were built along the river bank and partly over the water from the beginning of Jalan Stoney up towards the Customs Wharf until such time as the shop area could be cleared and drained.

Gradually the health of the population improved and order was restored to something like normal. Trade began again though very slowly and prices, other than those goods distributed from the Supply Depot, were prohibitive at first.

On 6th July 1946, the Government of the country was formally handed over to the Civil Authorities.

Chapter III.

ADMINISTRATION

BRUNEI is a sultanate. The present Ruler, the twenty-eighth of his line, His Highness Sir Omar Ali Saifuddin, K.C.M.G., was born on 23rd September, 1916, and succeeded to the throne, on the death of his elder brother, on the 6th June, 1950.

The supreme authority in the State is vested in the Sultan in Council. The State Council consists of eleven members, including the British Resident with the Sultan as President. The assent of the Council is required for the enactment of legislation and important questions of policy are referred to it.

The general functions of administration are carried out by a British Resident under the supervision of the Governor of Sarawak as High Commissioner. By a Treaty of 1906 the Resident's advice must be asked and acted upon in all questions other than those affecting the Mohammedan religion. The seat of Government is in Brunei Town and there are Assistant Residents at Kuala Belait and at Headquarters.

The State is divided into four administrative districts, namely, Brunei and Muara, Temburong, Tutong and Belait, in each of which there are Malay District Officers who are responsible to the Resident.

European Officers are generally in charge of the Public Works, Medical, Agricultural, Forests, Police, Customs and Education Departments, but at present the Agricultural Department is without a European head. The Controller of Customs and Marine is also State Treasurer, and the State Engineer supervises the Electrical Department.

At Brunei, Tutong and Kuala Belait there are Sanitary Boards whose members, of all nationalities, are appointed by Government. They are responsible for sanitation, conservancy, street lighting, rating and other municipal matters within their respective areas.

Government continues to control the distribution of commodities such as rice and sugar. For this purpose there are Supply Depots in Brunei Town and Kuala Belait, and prices are strictly controlled.

Chapter IV.

WEIGHTS AND MEASURES

BOTH English and local weights and measures are used. The legal standard weights and measures from which all others are ascertained are the Imperial yard, the Imperial pound and the Imperial gallon.

The following are the principal local weights and measures and their English equivalents:—

The chupak equal to 1 quart.

The gantang, equal to 1 gallon.

The tahl equal to $1\frac{1}{4}$ ozs.

The kati (16 tahils) equal to $1\frac{1}{4}$ lbs.

The pikul (100 katis) equal to $133\frac{1}{4}$ lbs.

The koyan (40 pikuls) equal to $5,333\frac{1}{4}$ lbs.

APPENDIX

APPENDIX "A"
TABLE SHOWING QUANTITY AND VALUE OF IMPORTS FOR YEARS 1953 AND 1954

Group No.	Heading	Unit	1953		1954	
			Quantity	Value \$	Quantity	Value \$
001	Live animals, chiefly for food	heads	5,744	423,706	39,016	1,004,016
011	Meat; fresh, chilled or frozen	lbs.	213,979	263,639	302,150	377,963
012	Meat; dried, salted or smoked not canned	"	270,431	560,938	382,894	772,959
013	Meat canned and meat preparations, canned and not canned	"	210,950	449,961	309,553	648,545
021	Milk and cream; fresh	"	—	—	—	—
022	Milk and cream; evaporated, condensed or dried	"	985,972	688,972	1,582,201	1,087,287
023	Butter	"	101,833	192,762	204,616	341,875
024	Cheese	"	32,366	53,681	35,073	57,961
025	Eggs	pcs.	1,208,042	265,627	1,262,015	299,081
026	Natural honey	lbs.	852	638	2,050	2,091
029	Miscellaneous dairy products	"	—	324,457	—	396,464
031	Fish; fresh or simply preserved	pkl.	2,320	185,400	2,549	279,046
032	Fish canned and fish preparations	lbs.	287,153	331,012	341,095	447,659
041	Wheat unmilled	pkl.	72,477	2,472,361	53,629	1,737,813
042	Rice	"	—	—	—	—
043	Barley, unmilled	"	—	265,309	—	314,603
044	Maize (corn) unmilled	"	—	—	—	—
045	Cereals unmilled, other than wheat, rice, barley and maize	"	—	—	—	—
046	Wheat flour	lbs.	1,586,564	331,477	1,450,552	315,155
047	Cereals milled, except wheat flour	"	267,063	64,399	—	1,845
048	Cereal preparations	pkl.	—	738,181	—	769,960
051	Fruits and nuts, fresh (not including oilnuts)	"	—	337,542	—	409,548
052	Dried fruits	"	—	35,509	—	—
053	Fruits preserved and fruit preparations	lbs.	—	262,419	—	336,085
054	Fresh and dry vegetables, roots and tubers, not included artificially dehydrated	pkl.	—	482,246	—	800,153
055	Vegetables, preserved and vegetable preparations	lbs.	—	366,041	—	309,186
061	Sugar	"	3,141,167	907,610	4,162,722	918,141
062	Sugar preparations	"	—	294,272	—	409,087

Group No.	Heading	Unit	1953		1954	
			Quantity	Value \$	Quantity	Value \$
071	Coffee	lbs.	169,730	235,041	157,278	302,587
072	Cocoa	"	23,392	49,127	10,130	15,957
073	Chocolate and preparations	"	—	249,480	—	420,394
074	Tea and mate	"	70,141	178,631	67,640	176,731
075	Spices	"	—	128,186	—	139,941
081	Feeding stuff for animals not including unmilled cereals	pkl.	—	307,137	—	472,124
091	Miscellaneous food preparations	lbs.	368,752	645,507	381,568	642,528
099	Miscellaneous food preparations n.e.s.	"	—	557,819	—	630,825
111	Water and other non-alcoholic beverages	gls.	—	182,399	—	190,802
112	Alcoholic beverages	lbs.	210,466	1,202,833	415,980	1,782,371
121	Tobacco unmanufactured	lbs.	—	—	—	—
122	Tobacco manufactured	pkl.	317,486	1,732,070	386,464	2,249,442
211	Hides and skins (except for skins) undressed	pkl.	—	9,474	—	5,091
212	Fur skins undressed	pkl.	—	—	—	68,342
221	Oilseeds, oilnuts and oil kernels	lbs.	—	—	—	—
231	Crude rubber, including synthetic and reclaimed	ton	—	—	—	3,338
241	Fuelwood and charcoal	ton	—	—	—	—
242	Wood in the round	ton	—	—	—	—
243	Wood shaped or simply worked	pkl.	8,329	1,190,633	10,233	1,248,550
244	Cork, raw	"	—	20,228	—	17,081
251	Pulp and waste paper	"	—	—	—	—
261	Silk	lbs.	—	—	—	—
262	Wool and other animal hair	lbs.	—	69,788	—	147,301
263	Cotton	lbs.	—	35,612	—	15,081
264	Jute	"	—	162,710	—	92,463
265	Vegetable fibres except cotton and jute	lbs.	—	—	—	—
266	Synthetic fibres	"	—	—	—	—
267	Waste materials from textile fabrics	lbs.	—	—	—	—
271	Fertilizers, crude	lbs.	—	—	—	33,170
272	Crude minerals, excluding coal, petroleum fertilizer materials & precious stones	ton	—	185,191	—	2,205
281	Iron ore	ton	—	—	—	784,012

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1953	
			Quantity	Value \$	Quantity	Value \$
282	Iron and steel scrap	ton	—	—	—	—
283	Ores of non-ferrous base metals and concentrates	"	—	—	—	—
284	Non-ferrous metal scrap	—	—	—	—	—
285	Silver and platinum	—	—	—	—	—
291	Crude animal materials, inedible, n.e.s.	—	—	—	—	—
292	Crude vegetable materials, inedible, n.e.s.	lbs.	—	183	—	—
311	Coal, coke and briquettes	—	—	—	—	—
312	Petroleum, crude and partly refined	gls.	—	—	—	—
313	Petroleum products	"	3,618,313	4,491,613	6,031,102	6,106,411
314	Gas, natural and manufactured	cu. ft.	—	25,113	—	41,478
315	Electric energy	—	—	—	—	—
411	Animal oils and fats	pkl.	—	724,357	—	2,470
412	Vegetable oils	"	—	—	—	971,536
413	Oils and fats processed, and waxes of animal or vegetable origin	"	—	—	—	94
511	Inorganic chemicals	lbs.	—	1,644,150	—	1,310,536
512	Organic chemicals	gls.	—	—	—	4,582
521	Mineral tar and crude chemicals from coal petroleum and natural gas	—	—	645,132	—	145,256
531	Coat-tar dyes	—	—	548	—	8,558
532	Dyeing and tanning extracts & synthetic tanning materials	—	—	—	—	—
533	Pigments, paints, varnishes and related materials	—	—	1,103,534	—	1,041,836
541	Medicated and pharmaceutical products	—	—	651,202	—	728,514
551	Essential oils, perfume and flavour materials	—	—	—	—	—
552	Perfumery, cosmetics, soaps and cleansing and polishing preparations	—	—	289,753	—	412,864
561	Fertilizers, manufactured	Rds/pcs.	—	5,804	—	3,305
591	Explosives	—	—	197,693	—	155,134
599	Miscellaneous chemicals materials products	—	—	30,936	—	3,720
611	Leather	pkl.	—	—	—	4,713
612	Manufactures of leather, n.e.s.	—	—	75,402	—	53,605

APPENDIX

187

Group No.	Heading	Unit	1953		1954	
			Quantity	Value	Quantity	Value
				\$		\$
613	Furs, dressed or dressed and dyed	—	—	—	—	—
621	Rubber fabricated materials	—	—	82,137	—	90,531
629	Rubber manufactured articles, n.e.s.	pcs.	—	865,551	—	552,151
631	Veneers, plywood boards, etc.	—	—	615	—	38,310
632	Wood manufactures, n.e.s.	—	—	—	—	—
633	Cork manufactured	—	—	—	—	85
641	Paper and paperboard	—	—	809,913	—	665,940
642	Articles made of pulp, or paper and of paper-board	pkl.	—	—	—	—
651	Textile yarn and thread	—	—	172,172	—	320,463
652	Cotton fabrics of standard type	lbs.	—	21,073	—	25,091
653	Textile fabrics of standard type, other than cotton fabrics	yds.	1,212,818	1,048,383	1,121,235	853,470
654	Tulle, lace, embroidery, ribbons trimmings and other smallwares	"	155,271	180,517	235,963	250,274
655	Special textile fabrics and related products	—	—	—	—	183,765
656	Made-up articles wholly or chiefly of textile materials n.e.s.	—	—	248,676	—	—
657	Floor coverings and tapestries	—	—	361,742	—	772,942
661	Lime, cement and fabricated building materials except glass and clay materials	pcs.	—	20,443	—	11,815
662	Clay construction materials and refractory construction materials	ton	—	3,277,847	—	1,827,068
663	Mineral manufactures, n.e.s. not including clay and glass	—	—	680,391	—	344,450
664	Glass	—	—	8,753	—	357,730
665	Glassware	—	—	243,565	—	246,480
666	Pottery	—	—	284,733	—	241,596
671	Silver and platinum group metals	—	—	194,083	—	183,177
672	Precious and semi-precious stones and pearls, unworked and worked	thls.	—	10,053	—	7,271
673	Jewellery and goldsmiths' and silversmiths' wares	—	—	—	—	—
		—	—	183,600	—	328,910

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1953		1954	
			Quantity	Value \$	Quantity	Value \$
681	Iron and steel	—	—	15,492,447	—	11,688,880
682	Copper	—	—	41,106	—	37,701
683	Nickel	—	—	—	—	7,423
684	Aluminium	—	—	22,064	—	46,206
685	Lead	—	—	2,842	—	3,385
686	Zinc	—	—	160,471	—	204,762
687	Tin	—	—	—	—	—
689	Miscellaneous non-ferrous base metals employed in metallurgy	—	—	—	—	—
691	Ordnance	pcs.	—	5,759	—	30,252
699	Manufactures of metals, n.e.s.	ton	52	3,985,551	212	23,150
711	Power generating (except electric) machinery	pcs.	—	7,384,520	—	2,666,116
712	Agricultural machinery and implements	—	—	61,928	—	4,337,685
713	Tractors other than steam	—	—	700,222	—	61,659
714	Office machinery	pcs.	—	242,946	—	361,916
715	Metalworking machinery	"	—	2,100	—	193,434
716	Mining construction and other industrial machinery	—	—	—	—	—
721	Electric machinery apparatus and appliances	—	—	14,809,269	—	10,607,820
731	Railway vehicles	—	—	4,292,215	—	2,802,400
732	Road motor vehicles	—	—	59,092	—	25,317
733	Road vehicles other than motor vehicles	—	—	7,471,213	—	7,256,463
734	Aircrafts	—	—	443,920	—	383,270
735	Ships and boats	—	—	205,497	—	496,362
811	Prefabricated buildings and their assembled parts	—	—	1,177,573	—	1,367,700
812	Sanitary, plumbing, heating and lighting fixtures and fittings	—	—	1,971,094	—	1,077,858
821	Furniture and fixtures	—	—	152,786	—	173,380
831	Travel goods and handbags, etc.	—	—	1,017,447	—	1,226,850
841	Clothing except fur clothing	—	—	259,849	—	47,287
842	Fur clothing	—	—	481,722	—	521,623
851	Footwear	—	—	—	—	—
861	Scientific, medical, optical, etc. instrument	prs.	97,670	345,543	127,916	384,787

Group No.	Heading	Unit	1953		1954	
			Quantity	Value \$	Quantity	Value \$
862	Photographic and cinematographic supplies ...	—	—	112,630	—	118,024
863	Exposed cinematographic films ...	rls.	14,112	13,742,768	10,753	10,456,761
864	Watches and clocks ...	—	—	121,975	—	221,822
891	Musical instruments, phonograph and phonograph records ...	—	—	88,188	—	105,231
892	Printed matter ...	—	—	74,809	—	175,220
899	Manufactured articles, n.e.s. ...	—	—	2,484,679	—	2,225,570
911	Postal packages ...	—	—	—	—	—
921	Live animals other than for food ...	heads	4	955	71	848
931	Returned goods and special transactions	—	—	—	—	3,616
	Notes ...	—	—	9,585,000	—	11,730,000
	Coins ...	—	—	15,000	—	55,500
	Gold ...	—	—	286,780	—	103,888
	Re-export			123,322,162		111,666,394
				5,001,930		14,030,318

APPENDIX "B"

TABLE SHOWING THE QUANTITY AND VALUE OF PRINCIPAL EXPORTS FOR THE YEARS 1953 AND 1954

Group No.	Heading	Unit	1953		1954	
			Quantity	Value \$	Quantity	Value \$
	Crude oil ...	Long ton	4,799,473	263,961,743	4,704,488	262,206,468
	Firewood, mangrove	ton	15,761	270,756	11,518	172,678
	Jelutong rubber ...	"	154	271,445	161	311,760
	Natural Gas ...	1,000 cu. ft.	2,059,127	514,781	2,353,826	588,458
	Plantation rubber ...	pound	2,616,605	1,699,347	1,995,026	1,180,896
				266,718,072		264,460,260

APPENDIX "C"

STATISTICS OF LAND APPLICATIONS

1. Total number of new applications of under 10 acres:—

				1953	1954
(a) Bruneians	...	...	...	778	1,949
(b) Others	...	...	...	229	194
(c) Total	...	...	...	1,007	2,143

2. Total number of new applications of over 10 acres:—

				1953	1954
(a) Bruneians	...	...	...	37	11
(b) Others	...	...	...	28	8
(c) Total	...	...	...	65	19

Grand Total	...	1,072	2,162
-------------	-----	-------	-------

3. Applications for:—

				1953	1954
(a) Sago Land	...	...	...	60	21
(b) Padi Land	...	...	...	215	156
(c) Rubber Land	...	...	...	94	208
(d) Fruit and Vegetable Land	...	...	...	658	1,688
(e) Pastoral Land	...	...	...	15	3
(f) Other Land	...	...	...	30	86
Total	...	...	...	1,072	2,162

APPENDIX "D"

RAINFALL IN INCHES FOR VARIOUS STATIONS IN BRUNEI STATE, 1954

<i>Month</i>	<i>Brunei Town</i>	<i>Tutong</i>	<i>Kuala Belait</i>	<i>Temburong</i>	<i>Kilanas</i>	<i>Birau</i>
January	4.42	10.22	12.78	16.91	7.84	2.55
February	5.29	6.27	8.44	10.86	3.06	3.50
March	4.82	7.29	7.65	13.75	5.85	4.28
April	6.95	7.71	10.14	17.75	10.00	7.61
May	6.48	3.09	6.65	6.95	4.32	3.51
June	20.48	11.93	6.60	10.23	16.93	12.69
July	8.47	9.06	6.71	8.81	9.23	4.25
August	6.57	9.85	11.32	2.25	10.11	6.48
September	13.40	11.80	9.49	9.89	12.87	14.03
October	13.31	16.61	19.74	20.50	12.88	9.43
November	10.32	14.21	24.11	12.43	9.07	6.66
December	9.03	8.70	12.57	19.89	8.06	10.00
Total 1954	109.53	116.74	136.20	150.22	110.22	84.99

PREVIOUS RECORDS (ANNUAL TOTALS) COMPARED WITH 1954

<i>Station</i>	<i>1949</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1954</i>
Brunei Town	141.60	91.49	124.35	104.40	84.28	109.53
Tutong	—	—	94.01	117.95	80.46	116.74
Kuala Belait	—	—	122.16	129.11	114.18	136.20
Kilanas	125.97	104.57	107.30	113.11	97.63	110.22
Birau	120.31	77.52	110.22	122.93	70.30	84.99

APPENDIX "E"

GLOSSARY OF VERNACULAR NAMES AND TERMS

Atap (leaf)	Roofing material made from palm leaves.
Belukar	Secondary forest after shifting cultivation.
Bukit	Hill.
Damar	Resin, obtained mainly from Dipterocarpaceae.
Getah	Rubber, latex.
Gula apong	Sugar obtained from the Nipah palm.
Jelutong	<i>Dyera</i> spp. The latex is the principal ingredient in chewing gum.
Kajang	Matting made from leaves, used as walling or roofing material.
Kapur	<i>Dryobalanops</i> spp. Medium hardwood.
Kapur paya	<i>Dryobalanops rappa</i> Becc. Medium hardwood, considered inferior to the hill kapurs.
Meranti	<i>Shorea</i> spp. Light hardwood.
Nibong	<i>Oncosperma filamentosa</i> Bl., a common palm producing a useful wood.
Nipah	<i>Nipa fruticans</i> Wurmb.; a palm common along the tidal reaches of rivers, and in mangrove swamps.
Pikul	133 lbs. weight.
Ramin	<i>Gonystylus bancanus</i> (Miq.) Kurz; light hardwood.
Resak	<i>Cotylelobium</i> and <i>Vatica</i> spp.; heavy and medium hardwoods.
Rumbia	<i>Metroxylon sagus</i> Rothb.; the sago palm.
Selangan batu	<i>Shorea</i> spp.; heavy hardwoods.
Seringawan	<i>Shorea albida</i> Sym.; a heavy red meranti.
Seringawan var. bunga	A light variety of <i>seringawan</i> .
Semayor	<i>Shorea inaequilateralis</i> Sym. Heavy hardwood.
Sungei	Stream.
Tikar	Woven mat of split material.
Ulu	Upper reaches of a river.

APPENDIX "F"

AREA IN acres OF CONSTITUTED AND PROPOSED FOREST RESERVES ON 31ST DECEMBER, 1954.

District	Name of Reserve	Area on 1.1.54	Finally Constituted Reserves Added during 1954	Reserves Excised during 1954	Area on 31.12.54	Proposed Reserves Preliminarily Notified	Number of Notification
Belaït	Labi Hills	263,000	—	—	263,000		48 & 49/1954
Belaït	Anduki	1,904	360	—	2,264		
Belaït	Badas	65	—	—	65		
Belaït	Forest Nursery	27	—	—	27		
Belaït & Tutong	Andulau	30,690	—	—	30,690		74/1954
Tutong	Ladan Hills	84,000	—	—	84,000		
Brunei	Berakas	560	—	—	560		
Temburong	Batu Apoi	188,500	—	27	188,500*		
Temburong	Selirong	6,175	—	—	6,175		
Temburong	Labu	22,200	—	—	22,200		
Temburong	Peradayan	2,650	—	—	2,650		
Total		599,771	360	27	600,131		

*As this figure is correct only to nearest 1,000 acres, there is no object in deducting 27 acres therefrom.

APPENDIX "G"

OUTTURN IN SOLID CUBIC FEET OF TIMBER AND FUEL UNDER LICENCES & PERMITS DURING 1954.

Forests	Heavy round	Hardwood Sawn	Other round	Timber Sawn	Total round	Timber Sawn	Poles		Firewood		Charcoal	Boats
							mangrove	other	mangrove	other		
A. Forest reserves	2,441	11,696	131,500	103,438	133,491	115,134	4,602	—	214,065	—	10,344	—
B. Other forests	5,165	57,493	481,812	65,728	486,977	123,221	24,600	24,233	194,613	48,484	24,214	62
								15,607	(B.M.P. Co.)			
Total	7,606	69,189	613,312	169,166	620,918	238,355	29,202	39,840	408,678	48,484	34,558	62

APPENDIX

APPENDIX "H"

OUTTURN OF MINOR PRODUCE UNDER LICENCES DURING 1954.

Forests	Getah Jelutong		Bamboos	Damar	Nibong		Rotan	Tikar & Kajang	Atap Nipah	Gula Apong	Misc.	Total
	Pikuls	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
A. Forest reserves	219	2,389	—	—	—	—	—	—	—	—	—	2,389
B. Other forests	2,347	25,274	60	7	1,146	162	636	598	44	133	28,060	
Total	2,566	27,663	60	7	1,146	162	636	598	44	133	30,449	

APPENDIX "I"

CRIME STATISTICS — 1954

1. *Seizable Offences — Penal Code*

True Reports	...	...	...	...	...	311
Murder	...	...	...	...	...	2
House-Breaking	...	...	...	...	...	13
Simple Theft	...	...	...	...	...	84
Criminal Trespass	...	...	...	...	...	29
Theft in Building	...	...	...	...	...	79
Dangerous Driving	...	...	...	...	...	19
Other Offences	...	...	...	...	...	93
Convictions	...	...	...	...	...	95
Acquittals	...	...	...	...	...	8
Undetected	...	...	...	...	...	175

2. *Non-Seizable Offences — Penal Code*

True Reports	...	...	...	...	...	305
Assaults	...	...	...	...	...	229
Mischief	...	...	...	...	...	22
Other Offences	...	...	...	...	...	55
Convictions	...	...	...	...	...	64
Acquittals	...	...	...	...	...	6
Referred to Magistrate	...	...	...	...	...	219

3. *Seizable Offences — Other Laws*

True Reports	...	...	...	...	...	184
Offences against Minor Offence Enactment	...	...	...	...	...	38
Offences against Opium Enactment	...	...	...	...	...	54
Offences against Alien's Enactment	...	...	...	...	...	35
Gambling Offences	...	...	...	...	...	1
Offences against Firearms Enactment	...	...	...	...	...	5
Convictions	...	...	...	...	...	185
Acquittals	...	...	...	...	...	8

4. *Non-Seizable Offences — Other Laws*

True Reports	...	...	...	...	...	382
Offences against Minor Offences Enactment	...	...	...	...	...	170
Other Offences	...	...	...	...	...	189
Convictions	...	...	...	...	...	281
Acquittals	...	...	...	...	...	8
Referred to Magistrate	...	...	...	...	...	91

5. *Traffic Offences*

True Reports	...	...	...	...	...	808
Offences against Traction Engine Enactment	...	...	...	...	...	618
Offences against Minor Offences Enactment	...	...	...	...	...	262
Convictions	...	...	...	...	...	428
Acquittals	...	...	...	...	...	124

APPENDIX "J"

EXPENDITURE ACCOUNT AS AT 31ST DECEMBER, 1954
(Electrical Department)

<i>Details of Expenditure</i>	<i>Estimated 1954 \$</i>	<i>Spent \$</i>	<i>Balance \$</i>
1. Personal Emoluments ...	104,799.00	58,604.61	46,194.39
Total, Personal Emoluments	104,799.00	58,604.61	46,194.39
Other Charges			
I.—Annually Recurrent			
2. Administration:—			
Transport and Travelling	3,200.00	1,326.98	1,873.02
Miscellaneous ...	500.00	372.21	127.79
3. Maintenance of Electricity Supply	250,000.00	189,077.10	60,922.90
4. Wiring to Buildings ...	1,000.00	288.00	712.00
Total, Annually Recurrent	254,700.00	191,064.29	63,635.71
II.—Special Expenditure			
5. Extension to Mains and Houses ...	65,000.00	58,883.08	6,116.92
6. Meters ...	30,000.00	25,820.50	4,179.50
7. Street Lighting Fittings ...	10,000.00	1,482.13	8,517.87
8. Electrical Apparatus for Hire ...	60,000.00	59,258.63	741.37
9. (e) 150 KW Generating set	100,000.00	8,260.81	91,739.19
10. (e) New Plant for Belait ...	118,000.00	93,338.35	24,661.65
11. Land Rover, two ...	12,300.00	12,040.00	260.00
12. Trucks, two ...	19,000.00	16,253.00	2,747.00
13. Training of Technicians ...	2,000.00	—	2,000.00
14. H.T. Transmission Line ...	100,000.00	—	100,000.00
Total, Special Expenditure	516,300.00	275,336.50	240,963.50
Total Electrical	875,799.00	525,005.40	350,793.60
Development Scheme	\$9,000,000.00	\$401,512.17	\$8,598,487.83

APPENDIX "K"

STATEMENT OF ACCOUNTS

*1st January 1954 to 31st December 1954**(Electrical Department)**Revenue**Expenditure*

ELECTRICITY SUPPLY

Collections ...	\$263,471.38	Wages, Stores, etc. ...	\$231,096.29
		Excess Revenue over Expenditure ...	32,375.09
	<u>\$263,471.38</u>		<u>\$263,471.38</u>

WIRING TO BUILDINGS

Collections ...	\$ 355.00	Wages, Stores, etc. ...	\$ 288.00
		Excess Revenue over Expenditure ...	67.00
	<u>\$ 355.00</u>		<u>\$ 355.00</u>

SALE AND HIRE OF ELECTRICAL APPLIANCES

Collections ...	\$ 20,851.00	Wages, Stores, etc. ...	\$ 1,432.88
		Excess Revenue over Expenditure ...	19,418.12
	<u>\$ 20,851.00</u>		<u>\$ 20,851.00</u>

APPENDIX "L"

PROFIT AND LOSS
(Electrical Department)

<i>Creditor</i>		<i>Debtor</i>
Electricity Supply		Electricity Supply
Excess Revenue over		Interest on Capital
Expenditure ...	\$32,375.09	\$317,410.33
		@ 3½% ...
Wiring		\$11,109.35
Excess Revenue over		Redemption Fund
Expenditure ...	67.00	Contribution on
		plant \$317,410.33
Hire of Electrical		@ 5% ...
Appliances		15,870.52
Excess Revenue over		Hire of Electrical
Expenditure ...	19,418.12	Appliances
Interest on Redemption		Interest on Capital
Fund \$34,841.95		\$77,558.42 @ 3½%
@ 3½% ...	1,219.47	2,714.53
		Redemption Fund
		Contribution on
		Appliances
		\$77,558.42 @ 20%
		15,511.68
		Profit 1954 ...
		7,873.60
	<u>\$ 53,079.68</u>	<u>\$ 53,079.68</u>

APPENDIX "M"

REDEMPTION FUND
(Electrical Department)

<i>Creditor</i>		<i>Debtor</i>
Electricity Supply		Balance on 31st
Contribution on 31st		December, 1954 ...
December, 1953 ...	\$24,530.62	\$66,224.15
Contribution on 31st		
December, 1954 ...	15,870.52	
Hire of Electrical		
Appliances		
Contribution on 31st		
December, 1953 ...	10,311.33	
Contribution on 31st		
December, 1954 ...	15,511.68	
	<u>\$ 66,224.15</u>	<u>\$ 66,224.15</u>

APPENDIX "N"

BALANCE SHEET AS AT 31ST DECEMBER, 1954.
(ELECTRICAL DEPARTMENT)*Liabilities*
CAPITAL**Electricity Supply:—**

As on 31st December, 1953	...	...	\$341,940.95	
Added on 31st December, 1954	...	...	359,357.15	\$701,298.10

Hire of Electrical Appliances:—

As on 31st December, 1953	...	...	87,869.75	
Added on 31st December, 1954	...	...	59,258.63	147,128.38

Loss (previous years)	...	...	...	47,346.25	
Profit 1954	...	...	...	7,873.60	39,472.65
					<u>\$887,899.13</u>

Assets

Plant	...	...	...	...	\$317,410.33	
Less Depreciation	...	...	...	...	15,870.52	
					<u>301,539.81</u>	
Added	...	...	...	...	359,357.15	\$660,896.96

Hire of Electrical Appliances:—

As on 31st December, 1953	...	...	77,558.42	
Less Depreciation	...	...	15,511.68	
			<u>62,046.74</u>	
Added	...	...	59,258.63	121,305.37

Redemption Fund	...	...	...	66,224.15	
Nett Deficit (previous years minus 1954)	...	...	...	39,472.65	
					<u>\$887,899.13</u>

APPENDIX "O"

BRUNEI

BRITISH RESIDENTS

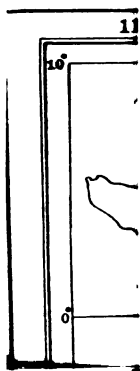
	1906/ May	1907 — M. S. H. McArthur
May	1907/ Dec.	1907 — H. Chevallier
Jan.	1908/ April	1908 — M. S. H. McArthur
April	1908/ Sept.	1909 — J. F. Owen
Sept.	1909/ Nov.	1909 — B. O. Stoney (Acting)
Nov.	1909/ Nov.	1913 — H. Chevallier
Nov.	1913/ Dec.	1914 — F. W. Douglas
Jan.	1915/ May	1916 — E. B. Maundrell
May	1916/ Mar.	1921 — G. E. Cator
Mar.	1921/ Mar.	1923 — L. A. Allen
Mar.	1923/ Feb.	1926 — E. E. F. Pretty
Mar.	1926/ Mar.	1927 — O. E. Venables
Mar.	1927/ May	1928 — E. E. F. Pretty
May	1928/ Jan.	1929 — P. A. B. McKerron
Jan.	1929/ Aug.	1929 — R. J. F. Curtis
Aug.	1929/ Sept.	1931 — P. A. B. McKerron
Sept.	1931/ Oct.	1934 — T. F. Carey
Nov.	1934/ Jan.	1937 — R. E. Turnbull
Jan.	1937/ Dec.	1939 — J. Graham Black
Jan.	1940/ Dec.	1941 — E. E. Pengilley
July	1946/ Jan.	1948 — W. J. Peel
Jan.	1948/ Aug.	1948 — L. H. N. Davis
Aug.	1948/ June	1951 — E. E. F. Pretty
July	1951/ June	1953 — J. C. H. Barcroft
June	1953/ July	1954 — J. O. Gilbert
July	1954/ Oct.	1954 — D. H. Trumble
Oct.	1954	— J. O. Gilbert

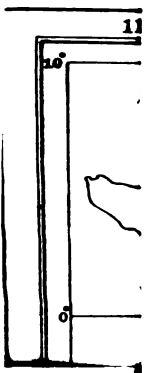
APPENDIX "O"—(Contd.)

ASSISTANT RESIDENTS

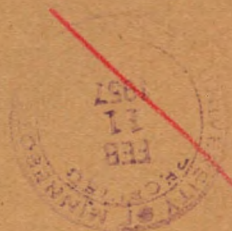
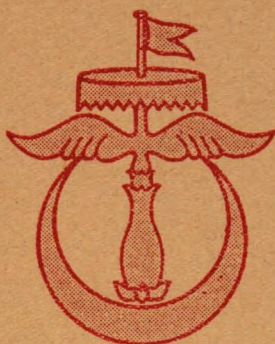
May	1905/May	1907 — F. A. S. McClelland
May	1907/June	1908 — J. C. Sugars
June	1908/Feb.	1910 — B. O. Stoney
Mar.	1910/May	1911 — W. H. Lee-Warner
Mar.	1911/Jan.	1913 — E. A. Dickson
Jan.	1913/1914	— H. H. Lee-Warner
	1914/1930	— Abolished
Jan.	1931/Sept.	1931 — T. F. Carey
Oct.	1931/Sept.	1933 — R. C. Gates
Aug.	1933/April	1935 — A. Glencross
April	1935/Mar.	1936 — D. A. Somerville
Mar.	1936/May	1938 — H. Hughes-Hallett
May	1938/April	1940 — E. C. C. Barrett
May	1940/Dec.	1941 — R. N. Turner
July	1946/Jan.	1947 — C. J. Briscoe
Jan.	1947/Dec.	1947 — N. H. Wood
Dec.	1947/Mar.	1949 — D. C. I. Wernham
Mar.	1949/Oct.	1949 — I. Harper (Kuala Belait)
Oct.	1949/June	1950 — I. Harper (Brunei)
Oct.	1949/Mar.	1951 — R. C. S. Bell (Kuala Belait)
Sept.	1950/Oct.	1951 — P. Scanlon (Brunei)
Mar.	1951/Nov.	1953 — G. A. T. Shaw (Kuala Belait)
Oct.	1951/April	1952 — R. G. Keech (Brunei)
April	1952/April	1953 — M. M. McSporran (Brunei)
Nov.	1953/Feb.	1954 — H. P. K. Jacks (Kuala Belait)
April	1953/Oct.	1954 — J. T. Weekes (Brunei)
Feb.	1954/	— P. A. Coates (Kuala Belait)
Oct.	1954/	— R. H. Morris (Brunei)

Note:— The appointment of Assistant Resident was abolished in 1915 and was not recreated until 1931 consequent upon the development of the Seria Oilfields, Kuala Belait. The appointment of Assistant Resident Brunei was created in October 1949.





UNIVERSITY OF
MINNESOTA LIBRARY



ANNUAL REPORT

BRUNEI

1955

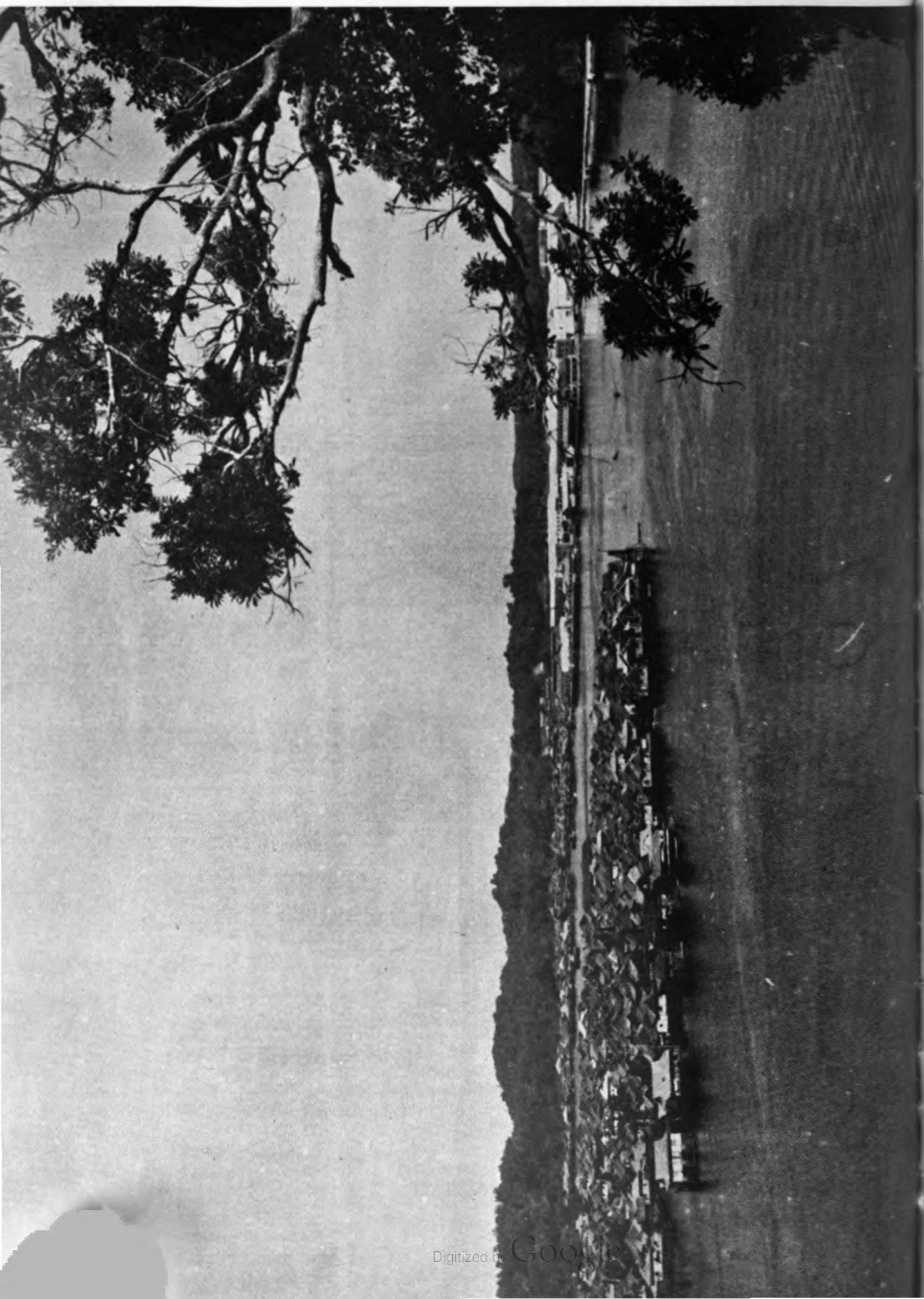
LONDON
HER MAJESTY'S STATIONERY OFFICE
1956

PRICE 6s. 6d. NET

Crown copyright reserved

Kampong Ayer
Brunei.

(Information Service
photograph)



Gt. Brit. Colonial Office

STATE OF BRUNEI



ANNUAL REPORT

1955

Set up and
Printed at the Government Printing Office,
Kuching, Sarawak,
F. W. Lane, Government Printer.

1956

319.71
2778

CONTENTS

PART I

CHAPTER	PAGE
1. GENERAL REVIEW OF 1955	1

PART II

2. OCCUPATION, WAGES AND LABOUR ORGANISATION	16
3. PUBLIC FINANCE AND TAXATION	24
4. CURRENCY AND BANKING	30
5. COMMERCE	31
6. PRODUCTION	35
7. SOCIAL SERVICES	69
8. LEGISLATION	121
9. JUSTICE, POLICE AND PRISON	127
10. PUBLIC WORKS AND UTILITIES	138
11. COMMUNICATIONS	166
12. PRESS, BROADCASTING, FILMS AND GOVERNMENT INFORMATION SERVICES	185

PART III

1. GEOGRAPHY	191
2. HISTORY	193
3. ADMINISTRATION	199
4. WEIGHTS AND MEASURES	201

CONTENTS.—(Contd.)

APPENDICES

	PAGE
A. PRINCIPAL IMPORTS FOR THE YEARS 1954 AND 1955	204
B. PRINCIPAL EXPORTS FOR THE YEARS 1954 AND 1955	211
C. GLOSSARY OF VERNACULAR NAMES AND TERMS ...	212
D. MONTHLY RAINFALL FOR 1955 AND PREVIOUS RECORDS COMPARED WITH 1955	214
E. CONSTITUTED AND PROPOSED FOREST RESERVES	215
F. STATEMENT IN MILES OF DEMARCATION AND MAIN- TENANCE OF EXTERNAL BOUNDARIES	216
G. OUTTURN IN SOLID CUBIC FEET OF TIMBER AND FUEL 1955	217
H. OUTTURN OF MINOR FOREST PRODUCE 1955 ...	217
I. STATEMENT OF REVENUE WHOLE STATE (FOREST DEPARTMENT)	218
J. EXPENDITURE OF WHOLE STATE 1955 (FOREST DEPARTMENT)	218
K. CRIME STATISTICS — 1955	219
L. PERSONS ENTERING AND LEAVING FOR THE YEAR 1955	221
M. BUILDINGS COMPLETED IN THE BRUNEI, MUARA, TUTONG AND TEMBURONG DISTRICTS DURING 1955	222
N. BUILDINGS COMPLETED IN THE KUALA BELAIT AND SERIA DISTRICTS DURING 1955	223
O. PROFIT AND LOSS — ELECTRICAL DEPARTMENT ...	224
P. BRUNEI — BRITISH RESIDENTS AND ASSISTANT RESIDENTS	225

ILLUSTRATIONS

Kampong Ayer, Brunei	...	...	...	<i>frontispiece</i>
Chasing Kites, Brunei River	...	...	...	} <i>between pages</i> 8 and 9
State Banquet	...	...	...
His Highness meeting Secretary of State for Colonies	...	...	...
Weaving, Kampong Ayer, Brunei	...	...	...
Drilling at Jerudong	...	...	...	<i>facing page 64</i>
B.M.P. Company helicopter	...	...	...	<i>facing page 65</i>
To School by water bus	...	...	...	} <i>between pages</i> 72 — 73
Sultan Omar Ali Saifuddin's College	...	...	...
Sinaut School	...	...	...
His Highness visiting girls school	...	...	...
Marine drilling—Seria	...	...	...	<i>facing page 120</i>
Red Cross—Blood donors	...	...	...	<i>facing page 121</i>
Blind Pensioner	...	...	...	<i>facing page 152</i>
New Customs House, Kuala Belait	...	...	...	<i>facing page 153</i>
Map of State of Brunei	...	...	...	<i>end cover</i>

PART I.

PART I.

GENERAL REVIEW OF 1955

THE year 1955 was a year of general prosperity. The finances of the State remained firm and progress under the Five Year Development Plan continued satisfactorily. Labour was able to command good wages, and there was plenty of employment for all.

It was also a satisfactory year for those engaged in Commerce; import duties for 1955 were lower than those of 1954, but this was due to conditions in the British Malayan Petroleum Company's import programme which is bound to fluctuate from year to year.

The most notable event of the year was the visit of Her Majesty's Secretary of State, the Rt. Honourable Mr. Alan Lennox-Boyd, and Lady Patricia Lennox-Boyd. This is the first time in history that a Secretary of State has visited Brunei and it was marked by a tremendous welcome from all members of the community. The Secretary of State was met at the mouth of the Brunei River by His Excellency, Sir Anthony Abell, K.C.M.G., High Commissioner for Brunei and the British Resident. During the latter part of the journey up-river, the launch was escorted by a large number of local craft gaily decorated for the occasion. The Secretary of State and Lady Patricia were welcomed by His Highness the Sultan of Brunei, the Ministers of State and Members of the State Council and a very large and enthusiastic crowd of people.

As the economy of the State depends so much on oil, it is only right that a review of the British Malayan Petroleum Company's activities should be outlined early in this report.

At the beginning of the year, the picture of the future of the Seria Oilfield was one of slowly declining production, the highest peak was believed to have been past. The development

of new techniques has materially altered this forecast, and the production for 1955 was in fact higher than ever before and four million barrels above the estimate.

Also during the year oil was found at Jerudong, approximately 14 miles from Brunei Town. This is the first new find of oil in Brunei since Seria Field was found in 1929. Although oil was found in the first well drilled, later results have been disappointing and it is much too early to make any forecast on what developments may be.

The Managing Director reports that Oilfield developments at Seria may be said to have passed out of the post-war rehabilitation period and are now operating to planned routine.

The Oilfield continues to expand its social amenities without in any way diminishing its progress as one of the largest, most complex and most productive industries in South East Asia.

It is Government's policy to resettle as many families as possible from the historic *Kampong Ayer* (Water Village) on to the mainland, where it is hoped that the people will cultivate the land, planting their own crops, fruit and vegetables, to their eventual benefit. Steps were taken during the year to carry out this policy, and although some progress was made, it was slow. It may be necessary to increase the already attractive financial aid from Government, if it is considered desirable to speed up the progress.

Staff in all departments of Government is inadequate. This is mainly due to the fact that the development of the State generally has produced very much more work both on the technical and administrative sides of the various Departments and also the policy of appointing officers from outside on contract only. The high salaries which it is necessary to offer in order to attract officers with the right qualifications are still not attractive enough to fill the posts, as most officers prefer pensionable posts and security to highly paid contract jobs without any security.

Due to the low standard of education which has prevailed in the State in the past years, it is almost impossible to recruit locally to fill the vacancies in the permanent establishment and it will be some years yet before the education plan will produce

sufficient boys and girls with educational qualifications necessary to fill these vacancies.

At the end of 1955 twenty pupils passed the Sarawak Junior Certificate, which is equivalent to Form III, and it will be another two years before any Brunei pupils obtain their Senior Cambridge School Certificate. This means that it will be seven years or more before Brunei has any candidates graduating from a University.

The recruitment of officers from outside the State is therefore of very great importance at the moment. This policy does not help in building up an efficient and satisfied civil service, and it is hoped that the policy may be relaxed, so that a certain number of candidates from outside can be taken on the pensionable establishment. If these candidates have not been accepted too young, they should not in any way block the promotion of Brunei boys in years to come.

District Advisory Councils were set up in late 1954, and have played a useful part during the year 1955. This is the first time that the people of rural areas have been able to air their complaints and views openly, and they have not been backward in doing so. This has kept Heads of Departments on their toes as their complaints (although sometimes frivolous) are generally directed towards the improvements of water supplies, communications and other social services.

Observers are appointed from each District Advisory Council who sit in State Council in that capacity, and who may address the Council if they give the necessary notice and obtain permission to do so. These observers are also called upon from time to time by the President, to address the meeting on matters dealing with their respective Districts.

On the whole, the experiment has proved successful, and it is hoped that these District Councils will eventually provide the electorate from which unofficial members will be drawn to sit on a Legislative Council.

The cost of living rose considerably during the year and so indeed did the standard of living. There was considerable pressure

constantly on Government to revise the salaries and the cost of living allowances. After lengthy research by a Select Committee, headed by the State Treasurer, a completely new Salaries scale structure was produced and approved by the High Commissioner.

Although there were considerable increases in certain department's scales, such as the Police, Marine and Technical scales, the increases in the clerical and other scales were very small.

One of the main objectives of the Select Committee was to create long time scales for certain types of officers. Experience was to be recognised as well as qualifications, and by these new long time scales, such persons as overseers could see before them a good career, even though they knew they had no chance of getting on to the higher technical scales. In this way an overseer type with long service could receive a salary considerably in excess of a technical assistant's with short service.

In spite of considerable increases in salaries during the year, Brunei is still unable to recruit sufficient local men for the State Police Force, and out of a strength of 364, there were still 112 vacancies at the end of the year. It was found necessary to continue the secondment of one platoon of Field Force from Sarawak in the Oilfields area, and also to ask for the secondment of 80 police from the Federation.

DEVELOPMENT

Development work, in the sense in which it is understood to-day, did not start in Brunei until 1953. The period between the end of the war and 1953 was taken up in repairing the very extensive war damage, and in rehabilitation work. In 1953 the State Council voted \$100 million for development work, but neither the men nor the materials to implement the programme were at hand. During 1954 detailed planning was put in hand and staff was recruited. The year 1955 was therefore the first year in which development really got under way. Reference is made to a number of development projects under the appropriate heads in later sections of this Report, but it will be useful to give a general outline of the main development work in this section of the Report.

Roads:

Probably the greatest achievement of the year was the organisation and starting of the road building programme. Only a few miles of road have as yet been built. The roads in the State are to be built by modern machinery operated in compact groups, and by the end of 1955 two such groups had started working and had constructed their first lengths of road. The first group was rebuilding the Brunei/Tutong Road, and second group was constructing a new road between Danau and Seria; the two sections will ultimately link up from the main Brunei Town—Seria trunk road.

One of the greatest impediments to road building is the acute shortage of satisfactory stone in the State, and during the year the Chief Roads Engineer undertook extensive experiments in the use of soil cement stabilisation. These experiments proved that the system is practicable in the State, and orders were placed for specialised heavy machinery for road construction by this method. By the end of the year some seven miles of road had been built in this way, and the first experimental stretches of soil cement stabilised road had satisfactorily withstood severe usage by the heavy Public Works Department vehicles and by trucks employed by the British Malayan Petroleum Company in the Jerudong area. The success of oil cement stabilisations means that the road programme will be able to proceed with greater speed at a lower cost than was originally thought likely.

Airport:

Work on the Brunei Airport proceeded somewhat slowly during the year, hampered partly by bad weather and partly by the need to put available machinery to work on roads which, during the last quarter of the year were in danger of being closed through exceptionally heavy rainfall. It is confidently expected, however, that the Airport will be available for use by Dakota sized aircraft during 1956.

Communications:

Communications within the State were further improved by the establishment of a VHF radio telephone circuit between Brunei and Kuala Belait and between these main centres and a number of subsidiary centres in the surrounding districts. VHF

telephone communication was also established to Miri in Sarawak and via Labuan to Jesselton in North Borneo.

Electricity:

For a number of years electricity supplies have been severely limited, but by the end of 1955 the power available at the Brunei Power Station was well in excess of the demand. One 280 KW. set had been installed and a second was in process of installation so that while the peak load is in the region of 300 KW. the station is in a position to provide a regular supply of 730 KW.

Agriculture:

Agricultural development work was concerned chiefly with experiments into the mechanised cultivation of padi and surveys for two irrigation schemes at Mulaut and Kilanas. These surveys indicated that considerable areas are suitable for irrigation for wet padi growing and Messrs. Sir Bruce White, Wolfe Barry & Partners are conducting experiments into means of mechanical planting and harvesting without the use of crawler type tractors which are unable to draw machinery through the deep mud of the Brunei padi fields. The experiments are based on a system of cable traction operated from the bunds dividing the padi fields.

The Rubber nurseries established in 1954 were in an advanced stage, and at the end of 1955 the first sales of improved budded stock were made. Stocks of budded stumps are now more than adequate and by the end of the year a replanting programme and programme of assistance to smallholders was drafted for implementation in 1956.

Education:

On the education side, 1955 saw the near completion of the new Government English School at Brunei Town and the dismantling of the old *kajang* buildings which have now been used for some 2½ years while the new school was being built. However, new school buildings are still quite inadequate to the number of children requiring entrance to schools, and many *kajang* buildings remain in use both in Brunei Town and in the Kuala Belait/Seria areas.

Some twenty-two primary schools were in the course of construction in various parts of the State during the year, but unfortunately none of these reached completion. However, it is certain that during 1956 a number of these will be available to replace the unsatisfactory structures now in use.

Broadcasting:

The first steps towards establishing a broadcasting station were taken during the year. Brunei is indeed indebted to Sarawak for much of the detailed work which was undertaken by the Chief Engineer Mr. J. R. Sandison of Radio Sarawak. Mr. Sandison and Mr. Baker a representative of Messrs. Marconi, visited the State in order to make a comprehensive survey of the requirement and to draw up proposals for a State-wide broadcasting service.

General:

The foregoing is an outline of the main aspects of the development programme. Throughout the State, however, there was unprecedented building and constructional activity which included improvements to the water supply in Brunei Town, construction of an entirely new water supply to Kuala Belait, the building of new Customs Houses and Wharf extensions at both Brunei and Kuala Belait, the construction of flats for wage earners and most important of all to the Brunei Malay community—the construction of the Mosque in Brunei Town. By the end of 1955 the scaffolding for this Mosque, which is expected to cost \$4,500,000, had risen well above the level of all other buildings in the town, despite the fact that the main minaret has only reached approximately one-third of its final height and the work on the main dome of the Mosque had not been commenced.

The limiting factor in the rate of development is now labour and supervisory staff. All contractors of good repute have their resources fully stretched and more work can only be let out as other works are completed.

The rapid pace of development in Brunei has necessarily involved the employment of contractors from outside Brunei to undertake the larger building and other development projects since local Malay contractors have not yet reached the necessary standard of efficiency although Government has made a number

of attempts to assist Malay businesses and Malay contractors. This has led to some criticism from the Malay population that profits on development of Brunei are going outside the State to foreigners to the State.. This criticism is however preferable to the alternative criticism of slow progress and delays which would undoubtedly follow any policy of restricting development work to local contractors and it is thought that the majority of the people are becoming appreciative of the benefits already instituted under the Development Plan, such as Old-age Pensions and Disability Pensions, free education, new schools, school feeding schemes, improved medical facilities, etc.

LIST OF VISITORS FOR THE YEAR 1955.

Professor Champion of the Imperial Forestry Institute at Oxford.

General Sir Charles Loewen, K.C.B., K.B.E., D.S.O., Commander-in-Chief, Far East Land Forces, Singapore.

Dr. Herman Kartowisastro, The Consul General for Indonesia and Vice Consul Mr. Saat Djajadisastra.

The Rt. Honourable Mr. Casey, Minister for External Affairs, Australia.

Mr. G. S. McDonald, Technical Education Adviser (Technical Co-operation Scheme of the Colombo Plan).

His Excellency the High Commissioner for Brunei.

Mr. E. A. Madden, Agrostologist, Department of Agriculture, N.Z.

The Rt. Honourable Mr. Malcolm MacDonald, Commissioner General for the South East Asia.

Mr. D. S. Armstrong, Canadian Trade Commissioner, Singapore.

The Rt. Honourable Mr. Alan Lennox-Boyd, M.P., Secretary of State for the Colonies accompanied by Lady Patricia, Mr. A. M. MacKintosh and Mr. J. B. Johnston.

Sir Alan Watt, Australian Commissioner in Malaya.

Mr. J. E. Maynes, Colonial Liaison Officer, National Institute of Agricultural Engineering.

H.M.S. Consort, Commander Mackenzie R.N. visited Belait.

Chasing kites
Brunei river.

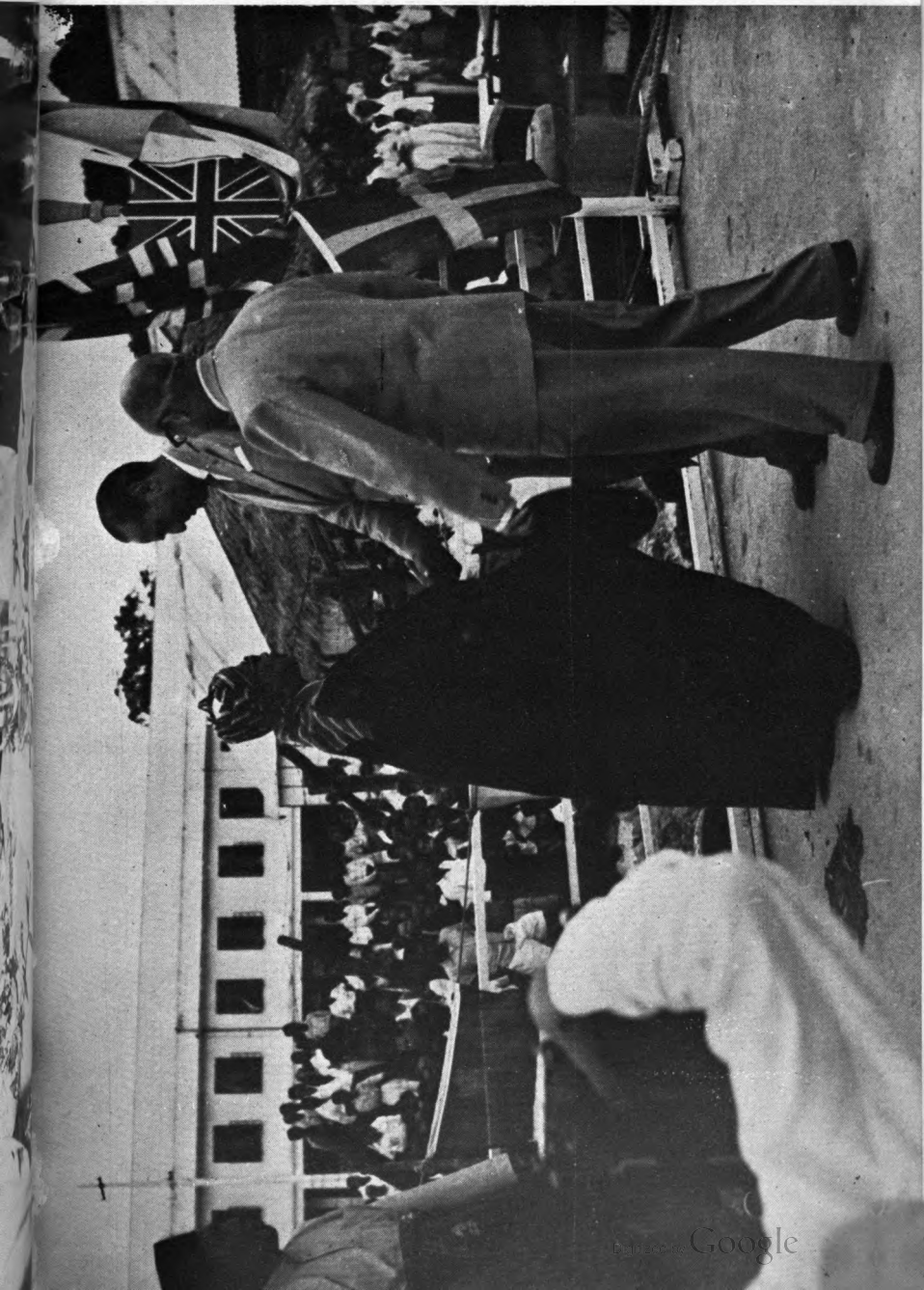


(Information Service
photograph)

State Banquet,
Secretary of
State for Colo-
nies' visit.



of State for
Colonies and
H.E. the High
Commissioner
for Brunei on
arrival in Brunei.



(Information Service
photograph)

Weaving, Kam-
pong Ayer
Brunei.



PART II.

CHAPTER I.

POPULATION

Distribution of Population:

THE bulk of the people in the State of Brunei live in the two main urban areas, namely, Kuala Belait/Seria and Brunei Town. The former area covers the British Malayan Petroleum Company Oilfield, while Brunei Town is the Government Administrative Centre. The population in these two areas is cosmopolitan.

The remainder of the population lives along the coast or along the banks of the three main rivers. The Malays are concentrated along the coastal strip and up the first few miles of the rivers. The character or distribution of the races up these rivers follows a fairly common pattern i.e. in the lower reaches Malays, then in the following order as one proceeds upriver—*Kedayans* and *Dusuns*; *Muruts* and finally *Ibans* (Dyaks). In one area (*Ulu Belait*), there is to be found, but only after careful pre-arrangement, a small group of *Punans*—the real jungle people. In the world famous *Kampung Ayer* (Water Village) over the river at Brunei Town, about 9,000 Malays live very much as they did several hundred years ago.

Estimation of Population:

In 1947, the year of the last census, it was reckoned that 40,670 persons lived in the State of Brunei in an area of 2,226 sq. miles, thus giving a density of population of 18.2 persons per sq. mile. Further details carried out during 1947 gave the various racial groupings as following:—

Malays (Brunei)	...	...	49.00%
Kedayans	...	...	17.00%
Dyaks	...	...	3.50%
Muruts	...	...	0.50%
Dusuns	...	...	7.00%
Chinese	...	...	19.00%
Indian	...	...	1.50%
Europeans	...	...	1.50%
Others	...	...	1.00%

Since 1947 it is estimated that the population has increased gradually until the figure of 60,770 was reached in 1954. During 1955 23,598 males and 10,159 females entered the State, a total of 33,737; on the other hand, 22,014 males and 9,433 females left the State giving a total of 31,447, or a gain of 2,290 persons by immigration. In addition to this the births totalled 3,600 and the deaths 878. The nett gain in population of the State was, therefore, 5,012, thus bringing the total estimated population to 65,342. This figure is an approximate one only.

Registration of Births and Deaths:

Births and Deaths Registration was introduced in 1922. The State Medical Officer is the Registrar of Births and Deaths. Deputy Registrars comprise Hospital Assistants in-charge of outstation Dispensaries, District Officers, *Ketuas* of *Kampongs* and Chinese Headmen. Other than in the three main Hospitals, the accuracy in connection with Births and Deaths cannot possibly be guaranteed. It has been noted however, that the outstation Deputies are doing more and more in an endeavour to keep proper records. In time to come, a separate Registration Office with trained outstation personnel may be established.

The following tables breakdown the figures for Immigration. Births and Deaths as indicated:—

TABLE I.

IMMIGRATION.

<i>Nationality</i> (In Alphabetical order)	<i>Entering</i>		<i>Leaving</i>		<i>Nett</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>		
American	44	14	41	13	+	4
British Indigenous	1,299	457	1,282	443	+	31
British Dyaks	1,500	210	1,289	196	+	225
British Malays	6,355	3,339	5,765	3,049	+	880
British Non-Indigenous	451	238	399	205	+	85
Burmese	38	35	34	29	+	10
Chinese (British & Aliens)	11,612	5,131	11,027	4,836	+	880
Dutch	230	120	290	126	—	66
French	14	4	10	2	+	6
Indian & Parkistanis	944	172	963	151	+	2
Indonesian	98	46	135	39	—	30
Swiss	15	3	15	4	—	1
Others	978	390	764	340	+	264
GRAND TOTAL	23,578	10,159	22,014	9,433	+	2,290

TABLE II.

DEATHS GROUP ACCORDING TO AGE, SEX, NATIONALITY.

Deaths by Age Groups	Sex	Europeans	Eurasians	Chinese	Malays	Indians	Native Bornean Races Other Than Malay	Others	Total
0 Weeks	M	—	—	16	174	—	26	—	216
	F	—	—	9	111	—	33	—	153
1 Year	M	—	—	6	52	—	9	—	67
	F	—	—	6	57	—	7	—	70
5 Years	M	—	—	2	4	—	—	—	6
	F	—	—	4	5	—	4	—	13
10 Years	M	—	—	—	9	—	1	—	10
	F	—	—	1	11	—	2	—	14
15 Years	M	—	—	2	4	1	6	—	13
	F	—	—	—	6	—	2	—	8
20 Years	M	—	—	1	3	—	3	—	7
	F	—	—	—	4	1	3	—	8
25 Years	M	—	—	—	12	—	1	—	13
	F	—	—	—	22	—	3	—	25
30 Years	M	—	—	1	6	—	3	—	10
	F	—	—	3	10	—	1	—	14
35 Years	M	—	—	2	12	—	2	—	16
	F	—	—	—	11	—	5	—	16
40 Years	M	—	—	3	4	1	4	—	12
	F	—	—	—	8	—	4	—	12
45 Years	M	—	—	3	6	—	2	—	11
	F	—	—	2	4	3	1	—	10
50 Years	M	—	—	1	6	—	2	—	9
	F	—	—	3	8	—	2	—	13
55 Years	M	—	—	15	44	—	9	1	69
	F	—	1	7	42	—	13	—	63
Total Deaths	M	—	—	52	336	2	68	1	459
	F	—	1	35	299	4	80	—	419
TOTAL	MF	—	1	87	635	6	148	1	878

TABLE III.

BIRTH REGISTERED ACCORDING TO SEX AND NATIONALITY.

Sex	Europeans	Eurasians	Chinese	Malays	Indians	Native Born: Races other than Malay	Others	Total	Total Both Male and Female
Male	17	11	519	857	47	396	26	1,873	
Female	19	6	454	845	49	332	22	1,727	
Total	36	17	973	1,702	96	728	48	3,600	3,600

TABLE IV.

DEATHS REPORTED BY DEPUTY REGISTRARS.

Certified by Medical Practitioners ...	...	...	...	152
Certified by Registering Officers after Death	...	...	...	278
Uncertified	...	...	...	448
GRAND TOTAL				878

Comments:

A study of Table I shows that more Chinese entered the State than any other nationality. This is easily accounted for. This increase represents almost entirely an inflow of Chinese labourers on contract work, and they will be in the State for a maximum period of two years only.

The tables of Births and Deaths indicate an Infant Mortality rate of 102.5 and the following table gives this rate over the period 1948-1955:—

1948	...	...	...	258.5 per 1,000
1949	...	...	...	128.3 per 1,000
1950	...	...	...	136.9 per 1,000
1951	...	...	...	80.9 per 1,000
1952	...	...	...	103.9 per 1,000
1953	...	...	...	113.3 per 1,000
1954	...	...	...	99.6 per 1,000
1955	...	...	...	102.5 per 1,000

The United Kingdom rate for 1953 was 28 per 1,000.

For those who like comparisons the following tables may be of interest:—

CRUDE BIRTH RATES (APPROXIMATE ONLY)

			1953	1954	1955
Total Birth	...	...	2,903	3,332	3,600
Male	...	...	1,496	1,734	1,873
Female	...	...	1,407	1,598	1,727
Birth Rate Per Mille	...		52.3	57.3	52.5

CRUDE DEATH RATES (APPROXIMATE ONLY)

			1953	1954	1955
Total Deaths	...	...	808	766	878
Male	...	...	447	415	459
Female	...	...	361	351	419
Death Rate Per Mille	...		14.6	13.1	13.9

Note: The Crude Birth and Death rates are based on an approximate mid-year population of 62,836. However the reader should bear in mind the fact that there has been one census only in (1947), since the Second World War. Furthermore records for the period immediately following this census are scanty, and the population increase has been based mainly on Immigration figures, and those Births and Deaths which have been reported. It is not possible to state the margin of error, which almost certainly exists.

CHAPTER II.

OCCUPATION, WAGES AND LABOUR ORGANISATION

DURING the year there was little change in the overall picture of occupation in the State. At one end of the scale is the cultivation of small holdings by the rural indigenous population engaged in self-sufficient pursuits such as agriculture, fishing or the harvesting of jungle produce. At the other is the oilfield of Seria, where employment and in many cases preliminary training, is available in many of the skilled, unskilled and artisan trades incidental to an oil company.

With the extensive development programme of the State, the construction of roads and buildings, both public and private buildings continued within the localities of Brunei Town, Seria and Kuala Belait. Large numbers of skilled and unskilled labour were absorbed and to meet this increased building activity the number of small sawmills, woodworking and furniture shops increased by 40% in number and productivity.

The high price prevailing for rubber during the year induced considerable interest in small holder production. The four larger estates, due to labour shortage, were not able to increase their output as much as the high price for the commodity justified. Market gardening in the western area of the State continued to expand in order to meet the increasing oilfield area's demand for fresh vegetables.

Unemployment is non-existent as the demand for labour in both the skilled and the unskilled grades for outstrips supply. There is, therefore, no unemployment problem. The problem is rather the converse and consists in meeting excess demand for labour caused by the activities of the British Malayan Petroleum Company and their contractors, the Public Works Department and their contractors in carrying out the State Development Plan, the four rubber estates and some 18 small sawmills and woodworking industries working at full pressure. Outside these

activities the population is mainly engaged in peasant agriculture. Excess demand for unskilled labour must therefore be met by recruitment from either Sarawak or North Borneo, and in the case of skilled and artisan workers, by importation from Hongkong, Malaya and India.

A careful check is kept on the entry of such labour into the State. Such immigrant labour may only be engaged by reference to the Commissioner of Labour. All permits are for limited periods and are granted only to enable the completion of a specified task and where practicable, the training of a local worker in the same project.

With a slightly increased output of crude oil in 1954, the British Malayan Petroleum Company, Limited, had at Seria in its service some 1,308 (1,277 in 1954) European and a reduced Asian labour strength composed as follows:—

<i>Nationality</i>	<i>Unskilled</i>	<i>Skilled</i>	<i>Total</i>
Chinese	438	1,028	1,466
Malays	665	994	1,659
Indians	88	589	677
Ibans	345	128	473
Javanese	12	29	41
Others	1	3	4
Total	<u>1,549</u>	<u>2,771</u>	<u>4,320</u>

Wage Policy of the Oil Company:

The basic rates of pay of the Company's workers ranged from the minimum of \$3.56 per day for unskilled to \$9.30 per diem for the highest skilled artisans. Out of 4,320 (5,000 the previous year) workers employed by the Company some 290 only are on minimum rates, a figure comparing favourably with the 600 of the previous year.

Some additional 2,360 workers are employed by contractors operating on behalf of the Company within the oilfield area. The Company endeavours to safeguard the interests of such labour by inserting in the contract a clause binding the Contractor to observe all Brunei legislation effecting the conditions of employ-

ment in the State. Constant scrutiny and inspection is undertaken both by the Company and the Commissioner of Labour to ensure that such legislation is observed.

Additional features of the Company's wage policy include a temporary cost of living allowance at the rate of 25% of basic pay for married and 15% for single workers, schemes of allowances for workmen working in areas where living accommodation, amenities, etc. are temporarily below the standard provided elsewhere. Other allowances additional to normal pay are given for such work as diving, work of an exceptionally dirty nature, standing by, etc.

Hours of work are $43\frac{1}{2}$ per week, the working week consisting of $5\frac{1}{2}$ days. Shift workers do, however, work 6 shifts of 8 hours per week; but these men are paid a bonus for the afternoon and night shift.

Fifty percent extra pay is paid for all overtime worked. Employees receive annually two week's leave with pay, and, when absent from work through sickness, they receive full pay and cost of living allowance for the first two, and half pay plus half cost of living allowance for the next 10 weeks.

On retirement the Company pay an ex gratia payment in accordance with its own regulations on the basis of service and last rate of pay.

Of the welfare and amenities provided by the Company for its staff and workers the following are of interest:—

Health and Medical Services:

From its inception the Company has provided its own medical and health services. These have been open not only to employees, but also to their dependants. The Company operates a well equipped hospital at Kuala Belait with modern X-ray installations and full equipment for medical and surgical treatment and laboratory examinations. In addition to the hospital there are dispensaries and First Aid points throughout the oil-field to deal locally with staff and labour. These are coupled with an emergency medical and ambulance service which covers

he oilfield areas and conveys patients rapidly to the Kuala Belait hospital. For maternal and child Welfare the Company runs a pre-and-post-natal clinic.

A Joint Company and Government campaign against malaria is maintained. All new arrivals are checked for malaria infection and active measures are taken to eliminate the mosquitoes by draining and spraying potential breeding grounds.

Clubs:

There are four clubs for Labour Force employees in the Seria oilfield and each are run by a management committee elected from the club members. Although the policy is one of non-interference the Company takes considerable interest in their activities, assisting whatever necessary.

Recreation and sports amongst its employees have always been strongly encouraged by the Company and the clubs each have their facilities and equipment for football, cricket, hockey, badminton, volley ball and other games.

For the Regional Staff (Senior Asian Staff) there is a recreation club offering similar facilities.

The Kuala Belait Recreation Club, the only club in the area with no Company affiliations continues to expand. Members, including Company and Government employees and members of the commercial community, with widely differing interests, have found it a most valuable common meeting ground.

Cinema:

The oil company operates a new cinema of permanent open construction at Seria. Shows are held on daily and include British, American, Malay, Chinese and Indian films.

Transport:

The oil company provides free transport for its workmen to and from work.

Joint Consultation:

An effective channel of communication exists between the Company and their workers. Labour Force representatives who are elected annually meet the management once a month and

discuss working conditions, disputes, grievances and other matters affecting mutual relations and understanding. They are composed of ten Malays, ten Chinese, five Indian and five Iban members roughly in proportion to their strengths in the Labour Force.

The Management Chairman is the Labour Force Officer. The Industrial Relations Officer, the Assistant Operations Superintendent, a Senior Engineering representative and other technical representatives attend from time to time to accord with the subject matter of the agenda, for example in any medical discussions the Chief Medical Officer would attend.

The scope of the discussions are very wide and, excepting individual cases, may consider any question concerning working conditions in general and any proposal by the workers or by the Company in regard to the promotion of industrial relations, improved production and efficiency.

Examples of subjects discussed during the year were housing, provision of transport, increased shift rates, medical and health, provision of safety boots, leave, retirement gratuities, grading of jobs, wages and allowances, provision of telephones at selected points, provision of water tanks and extension of ferry services.

In this way an effective channel of communication exists between the Company and its workers with a view to promoting a good management—employee relationship, so essential to an organisation of this nature.

Housing:

The housing programme continues to progress and more labour and regional staff are now housed to a standard that compares favourably with any other oilfield in the world.

Safety:

Since 1950 the Company has made a great effort to improve safety precautions and to reduce its accident rate. A safety department under an experienced officer specially trained in Safety work is actively engaged in the investigation of accidents and the inspection of plant and operations. A detailed analysis of accident statistics is made in order to determine the chief

causes and so indicate the type of campaign required to combat them e.g. whether by way of propaganda, mechanical safeguards, protective equipment, training, lectures or disciplinary action.

The safety department has the full support of management and by tact and enthusiasm has obtained the co-operation of Department Heads. This has enabled a considerable improvement in the overall accident frequency rate.

Education:

In addition to subsidising the attendance of children of its workers at non-Company schools in Seria and Kuala Belait, the oil company runs a Technical Trade School at Seria. This provides a three-year apprentice course and gives practical training in fitting, turning, motor and diesel mechanics, welding and blacksmithing; on the theoretical side there is instruction in the theory of mechanics, workshop practice, electricity, mathematics and machine drawing. During the first year the apprentices do a full time school course equally divided between the classroom and the school workshops. In the second and third years 70% of the time is spent in the Company's workshops and 30% in the classroom.

Entry to either Trade Schools has hitherto been open to pupils from any school in British Borneo but with the Brunei English School now reaching the stage in their development where they can provide candidates with secondary school qualifications the seeking of candidates from outside Brunei is being reduced.

To illustrate the growth of the Trade School the number of apprentices at the end of 1952 was 67. Comparable figures for 1953, 1954 and 1955 respectively 100, 130 and 141. The estimated figure for the end of 1956 is 200.

In 1953 the Company and the Government negotiated a Scheme whereby the Company would take 25 Brunei youths the following year and thereafter annually. This Scheme is progressing and these youths are making good progress.

The Company also grants a number of scholarships to the children of Labour and Regional Staff to enable them to pass the Senior Cambridge Examination. The recipient of these awards

is in no way bound to enter Company employment on completion of the scholarship.

At the end of the year His Highness the Sultan opened new Trade School buildings to house these apprentices. These consisted of some 4 to 5 blocks for the purpose of housing, feeding and instructing them on the lines of a modern English Public School.

General:

The following table shows the racial distributions of Labour employed by the main sources of occupation outside the oil company:—

<i>Race</i>	<i>Government (Public Works)</i>	<i>Rubber</i>	<i>Sawmills & Woodworking</i>	<i>Total</i>
Malays	1,835	317	121	2,273
Ibans	189	14	211	414
Chinese	86	32	146	264
Indians	9	5	—	14
Javanese	1	14	—	15
Others	16	8	6	30
	<hr/> 2,136 <hr/>	<hr/> 390 <hr/>	<hr/> 484 <hr/>	<hr/> 3,010 <hr/>

The Labour Commissioner for Brunei, is also the Labour Commissioner for Sarawak and is normally stationed in the oil-fields at Kuala Belait. All Assistant Residents are Deputy Commissioners of Labour and are responsible within their Districts for enforcing labour legislation and for the periodical inspection of places of employment.

An up-to-date Labour Ordinance embodying the principles of the International Labour Conventions exists. Enacted in 1954, it gives workers protection in such matters as hours of work, health conditions, the age of admission to employment, medical treatment, provision of written contracts of employment, notice pay and conditions of extra-territorial recruitment. A new up-to-date Workmen's Compensation Enactment has been prepared to replace the present one. Similarly a new Factory Ordinance has been drafted.

The cost of living was stable during 1955. Taking 1951 as 100 the average cost of living throughout the year was 93.61. This compares with 94 for the previous year. The limits of monthly oscillation were between the figures of 89.45 and 98.52. These figures are based on the cost of reasonable living requirements of a workman, his wife and three children.

With the exception of one minor strike Brunei State was free from Labour unrest during 1955. Minor cases of wage disagreements were settled without difficulty by either the Commissioner or Deputy Commissioners of Labour. Industrial disputes are rare. Demand for labour is in excess of supply and wages are generally high.

CHAPTER III.

PUBLIC FINANCE AND TAXATION

Revenue and Expenditure:

THE surplus of Revenue over Expenditure, other than Development Expenditure, for the year 1955 was \$73,735,464 compared with \$72,674,509 in 1954 and \$76,329,946 in 1953. Revenue and Expenditure figures for the years 1953, 1954 and 1955 are given below:—

				<i>Revenue</i>	<i>Expenditure</i>	<i>Surplus</i>
				\$	\$	\$
1953	...	...	...	98,976,643	22,646,697	76,329,946
1954	...	...	...	96,035,394	23,360,885	72,674,509
1955	...	...	...	102,669,423	28,933,959	73,735,464

Development Expenditure during 1955 amounted to \$14,068,315 bringing total expenditure to \$43,002,274 or almost \$720 per head of population.

Revenue:

Details of revenue collected during 1955 are given below. The 1953 and 1954 figures are also shown for comparison:—

	1953	1954	1955
	\$	\$	\$
Duties, Licenses & Taxes	65,293,794	58,845,608	54,225,597
Fees of Court etc. ...	205,907	373,275	432,545
Government Undertakings	516,785	694,881	4,036,163
Revenue from Government Property ...	25,688,983	26,811,723	31,896,451
Interest ...	6,640,452	8,747,719	11,176,716
Miscellaneous ...	501,313	418,838	552,892
Land Sales ...	129,409	143,350	349,059
	<u>\$98,976,643</u>	<u>\$96,035,394</u>	<u>\$102,669,423</u>

The main Heads of Expenditure are shown hereunder:—

PART I

1.	Pensions, Retiring Allowances & Gratuities ...	174,870.87
2.	H.H. the Sultan	300,933.23
3.	Ministers	63,987.83
4.	British Resident	103,321.49
5.	Assistant Resident—Brunei	19,742.70
6.	Assistant Resident—Belait	70,813.36
7.	Agriculture	566,679.18
8.	Audit	36,140.28
9.	Civil Aviation	52,331.29
10.	Customs and Marine	995,851.53
11.	Education	1,179,514.91
12.	Electrical	729,360.87
13.	Forests	106,450.74
14.	Information Service	110,296.44
15.	Judicial	37,767.09
16.	Labour	30,316.62
17.	Land & District Offices	674,045.92
18.	Legal	52,574.36
19.	Medical & Health	1,669,329.46
20.	Miscellaneous	5,035,264.20
21.	Municipal	583,333.63
22.	National Registration	4,112.69
23.	Police	1,038,761.01
24.	Postal Services	253,260.80
25.	Prisons	39,524.60
26.	Public Works Department	637,553.49
27.	Public Works Annually Recurrent	1,536,238.44
28.	Public Works—Non-Recurrent	7,596,726.16
29.	Religious Affairs	97,915.02
30.	State Custom, Religious & Welfare	37,541.00
31.	State Stores	84,624.85
32.	Supplies	3,523,801.57
33.	Survey	504,922.43
34.	Telecommunications	865,900.64
35.	Treasury	120,150.79
		<hr/>
		\$28,933,959.49
		<hr/>

PART II—DEVELOPMENT PLAN EXPENDITURE

50.	Rubber Development	...	...	...	...	33,108.22
51.	Wet Padi Irrigation	...	...	...	...	49,931.29
52.	Mechanical Cultivation of Padi	...	...	...	...	264,384.66
53.	Agricultural Research	...	...	...	...	—
54.	Electricity—Brunei	...	...	...	...	815,889.99
55.	Electricity—Belait	...	...	...	...	109,610.39
56.	Electricity—Tutong	...	...	...	...	27,966.97
57.	Water Supplies	...	...	...	...	185,684.34
58.	Automatic Telephone Exchanges	...	...	...	...	—
59.	V.H.F. Radio Telephones	...	...	...	...	—
60.	Roads Programme	...	...	...	...	5,546,365.38
61.	Bridle Paths	...	...	...	...	77,495.66
62.	Brunei Airport	...	...	...	...	748,339.72
63.	Wharf, Kuala Belait	...	...	...	...	169,646.11
64.	Brunei Port	...	...	...	...	27,420.19
65.	River Clearing	...	...	...	...	—
66.	Miscellaneous	...	...	...	...	61,843.02
67.	Shops—Brunei	...	...	...	...	31,956.78
70.	Brunei Hospital	...	...	...	...	12,836.57
71.	Physiotherapy Department	...	...	...	...	18,397.52
72.	Hospital—Belait	...	...	...	...	32,475.78
73.	Rural Health Centres	...	...	...	...	2,080.00
74.	Rural Dispensaries	...	...	...	...	—
75.	T.B. Sanatorium	...	...	...	...	—
80.	Trades Training	...	...	...	...	328,766.56
81.	Teachers from Malaya	...	...	...	...	48,816.20
82.	Building grants	...	...	...	...	115,000.00
83.	Secondary school building programme	...	...	...	...	766,805.78
84.	Brunei Secondary (Girls)	...	...	...	...	148,776.06
85.	Seria Secondary (mixed)	...	...	...	...	33,134.46
86.	Higher Primary Schools	...	...	...	...	140,514.44
87.	Seria Malay School	...	...	...	...	157,634.00
91.	Primary Schools	...	...	...	...	705,537.71
92.	School Feeding Scheme	...	...	...	...	496,733.46
93.	Broadcasting	...	...	...	...	282.25
94.	Housing	...	...	...	...	120,797.65

95.	Resettlement schemes	42,040.50
96.	Sports and Clubs	11,258.50
97.	Pensions—Administration	44,713.08
98.	Pensions Payments	521,132.00
100.	Administration and equipment	39,806.77
101.	Public Works Compounds	655,581.72
102.	Heavy Equipment	56,908.82
103.	Workshops & Mobile Maintenance	238,722.41
104.	Quarters and Rest House	623,332.43
105.	New Scheme	—
		<hr/>
		\$14,068,315.39

Financial Statement:

The Statement of Assets and Liabilities as at 31st December, 1954 and 1955, are set out hereunder:—

ASSETS

<i>Previous Year</i> 1954		1955
\$		\$
11,784,532	Cash in Treasury & Bank	4,634,905
6,846	Current accounts	12,890
2,726,016	Advances & Loans	554,503
73,503	Suspense	35,489
	Investments	
150,034,975	General Reserve	193,188,775
134,604,274	Surplus Balances	160,490,437
<hr/>		<hr/>
299,230,146		358,916,999

LIABILITIES

\$		\$
920,834	Deposits	718,753
90,967	Current accounts	312,753
150,034,975	General Reserve Fund	193,188,775
56,469,429	General Revenue Balances	87,051,093
91,713,941	Development Fund	77,645,625
<hr/>		<hr/>
299,230,146		358,916,999

During the year 1955 a further sum of \$43,153,799 was transferred to General Reserve Fund from General Reserve Balances.

Public Debt:

There is no public debt.

Customs Tariff:

The Customs Tariff is divided into two parts, namely—Import Duties levied on Intoxicating Liquors, tobacco, sugar, petroleum products, textiles and a variety of other products and Export Duties levied on rubber, copra, sago, livestock and sundry other products. Total import duty in 1955 amounted to \$3,813,342 and export duty totalled only \$58,531.

There was no change in the tariff in 1955.

Excise, Stamp Duties and Other Taxes:

Excise duty is levied on locally distilled samsu, which is the only alcoholic beverage manufactured for sale in Brunei.

Stamp Duties are levied on all documents required to be stamped under the provisions of the Stamp Enactment, and include a stamp duty on cheques, bills of exchange etc., and affidavits and contracts.

Estate Duty is levied under the Stamp Enactment upon all estates the value of which exceeds \$1,000 and the rates are as follows:—

Where the principal value of the estate;

exceeds \$	1,000 and does not exceed \$	5,000—	1%
exceeds	5,000 and does not exceed	10,000—	2%
exceeds	10,000 and does not exceed	25,000—	3%
exceeds	25,000 and does not exceed	50,000—	4%
exceeds	50,000 and does not exceed	100,000—	5%
exceeds	100,000 and does not exceed	150,000—	6%
exceeds	150,000 and does not exceed	200,000—	7%
exceeds	200,000 and does not exceed	300,000—	8%
exceeds	300,000 and does not exceed	400,000—	9%

exceeds	400,000 and does not exceed	500,000—10%
exceeds	500,000 and does not exceed	750,000—11%
exceeds	750,000 and does not exceed	1,000,000—12%
exceeds	1,000,000 and does not exceed	1,250,000—13%
exceeds	1,250,000 and does not exceed	1,500,000—14%
exceeds	1,500,000 and does not exceed	2,000,000—15%
exceeds	2,000,000 and does not exceed	3,000,000—16%
exceeds	3,000,000 and does not exceed	5,000,000—17%
exceeds	5,000,000 and does not exceed	7,000,000—18%
exceeds	7,500,000 and does not exceed	10,000,000—19%
exceeds	10,000,000 	—20%

Income Tax:

Income tax is charged, levied and collected under provisions of the Income Tax Enactment 1949, but at present only in respect of the incomes of registered limited Companies. On every dollar of the chargeable incomes of such Companies Income Tax is levied at the rate of 30%. There are reliefs in respect of tax paid in some other Commonwealth countries.

CHAPTER IV.

CURRENCY AND BANKING

Currency:

THE State is a party to the Malayan British Borneo Currency Agreement and only currency issued by the Board of Commissioners of Currency, Malaya and British Borneo is legal tender in Brunei; this, of course, includes the currency of the former Board of Commissioners of Currency, Malaya. The Dollar is valued at 2/4d (Sterling).

On 31st December, 1955, the amount of Malaya British Borneo Currency in circulation was estimated at \$39,490,000.

Banking:

Banking facilities in Brunei are provided by the Hongkong and Shanghai Banking Corporation which has branches at Brunei Town and Kuala Belait. The Hongkong and Shanghai Banking Corporation also operates a Savings Bank and at the 31st December, 1955, there were 893 accounts with deposits totalling \$1,843,287 compared with 294 accounts with deposits totalling \$486,481 at 31st December, 1954.

Post Office Savings Bank:

The number of depositors in the Post Office Savings Bank at the end of 1955 was 1,872 compared with 1,665 at the end of 1954. The growth of the Savings Bank is illustrated by the figures shown in the following table:—

Year			<i>Number of Depositors</i>	<i>Amount of Deposits</i>
31st December 1950	...	...	759	\$195,455
31st December 1951	...	...	928	265,605
31st December 1952	...	...	1,162	374,122
31st December 1953	...	...	1,399	521,378
31st December 1954	...	...	1,665	608,589
31st December 1955	...	...	1,872	670,633

CHAPTER V.

COMMERCE

TRADE and Commerce in Brunei is conducted by an increasing number of agency houses and Chinese merchants. The most important of the agency houses are the leading European firms, and they are responsible mainly for the import of goods direct from Great Britain, Australia and other sources. The number of Chinese merchants holding important agencies however, is on the increase, although the majority prefer to deal in the wholesale and retail distribution of goods purchased from merchants in Singapore, with whom they have had long established connections.

The Chinese merchants are responsible for the purchase of rubber and other jungle produce from the small holder and they provide the up-river population with sundry goods in exchange.

The whole of the import and export trade is carried on in the two ports of the State, i.e. Brunei Town and Kuala Belait, and it is at these two towns that the principal firms have established their business houses.

External Trade:

The value of the external trade of the State for the year 1955 was \$396,802,916 compared with \$373,357,401 in 1954, an increase of \$23,445,515.

The trade figures are made up as follows:—

	1955	1954
Total value of Exports ...	\$303,418,823	\$273,476,507
Total value of Imports ...	93,384,093	99,880,894
	<hr/>	<hr/>
Favourable trade balance ...	\$210,034,730	\$173,595,613
	<hr/>	<hr/>

Exports:

The f.o.b. value of exports for 1955 was approximately \$303,418,823, made up as follows:—

	1955	1954
Crude Oil	\$286,920,405	\$262,206,468
Rubber	3,569,958	1,180,896
Firewood mangrove	104,340	172,678
Jelutong Rubber	360,664	311,760
Natural gas	654,364	588,458
Sundries (including re-exports)	11,809,092	9,016,247
	<u>\$303,418,823</u>	<u>\$273,476,507</u>

Imports:

The declared value of imports for 1955 was approximately \$93,384,093 made up as follows:—

	1955	1954
Food	\$17,993,823	\$15,818,496
Beverages & Tobacco	3,830,632	4,222,615
Petroleum & Petroleum products	2,975,220	6,293,145
Textiles & wearing apparel ...	2,896,732	2,906,995
Chemicals & Drugs	2,481,578	2,005,910
Machinery & transport equipment	21,753,059	39,882,383
Building materials	14,899,034	4,639,606
Exposed cinematographic films ...	14,843,650	10,456,761
Manufactured articles and sundries	11,710,365	13,604,983
	<u>\$93,384,093</u>	<u>\$99,880,894</u>

Cargo Tonnage:

The total tonnage of cargo discharged and loaded for the year 1955 was as follows:—

	Discharged (Tons)	Loaded (Tons)
Brunei Town	40,076	16,947
Kuala Belait	125,177	44,627
Total	<u>165,253 tons</u>	<u>61,574 tons</u>

New Customs offices and godowns were constructed at Kuala Belait during 1955, together with a wharf with berthing facilities of 300 ft. At Brunei Town work commenced on the construction of Customs offices and godowns; a 400 ft. wharf is already in use. The buildings and wharves at both places have been, and are being constructed to provide adequate cargo handling facilities for the State. The Straits Steamship Company have three vessels operating on a full time run from Malaya and Borneo ports to Brunei.

Customs Revenue:

The total Customs revenue for 1955 amounted to \$4,004,305.

		1955	1954
Export Duties	... ..	\$ 178,179.75	\$ 58,532.00
Import Duties	... ..	3,826,125.61	4,433,943.00
		<hr/>	<hr/>
		\$4,004,305.36	\$4,492,475.00

The increase in revenue collected from export duties was occasioned by the increase in the value and amount of plantation rubber exported during the year.

Tariffs:

The following alterations were made to the Customs tariff during 1955:—

Export duties were imposed on pepper and illipenuts (Engkabang)

Legislation:

The following were the principal changes during 1955:—

The Customs Enactment, 1954, came into force on 1st January, 1955, and the following rules and regulations during that year:—

27-10-55	Notification 200/1955	Customs (Prohibition and Restriction on Imports & Exports) Order, 1955.
27-10-55	Notification 202/1955	Customs (Compoundable Offences) Order, 1955.
27-10-55	Notification 203/1955	Customs (Import & Export) Duties Order, 1955.
2-12-55	Notification 243/1955	Customs (Establishment of Customs Warehouses and Warehouse Rent) Order, 1955
28-12-55	Notification 277/1955	Customs Regulations, 1955.

Excise:

The only alcoholic beverage distilled in the State is *samsu*, the product of three distilleries. Excise duty is chargeable at \$5 per gallon and duty collected in 1955 amounted to \$32,260 as compared with \$36,523 in 1954.

Trade Correspondence:

The Controller of Customs & Excise is designated as Imperial Trade Correspondent for the State of Brunei. Numerous enquiries were received during the year from various business firms in other parts of the world and appropriate action was taken in respect of each.

CHAPTER VI.

(a) LAND UTILIZATION AND TENURE

Agricultural Land:

ANY person born in Brunei may acquire agricultural land in perpetuity. Others may acquire land with the approval of the State Council.

The Land Code contains an utilization clause and land must be brought under cultivation within three years of alienation, in practice it is most difficult to ensure that land is in fact brought under cultivation within the prescribed period and in a great many cases land is acquired by speculators who only commence work on the land if and when they receive the six months notice to cultivate which the Land Code requires should be given to those who do not at once comply with the conditions covering alienation of land.

During the last three years land prices have appreciated considerably, particularly so in the vicinity of the larger towns. There are cases where land under poor quality seedling rubber has changed hands at \$15,000.00 per acre or more. The appreciation in the price of land has increased the demand for a secure title and applications for land have increased correspondingly, so much so that the Land Office has been unable to cope and the time lag between the submission of an application and the issue of a title has shown a tendency to lengthen. To cope with this situation increases in staff were authorised, the additional staff are undergoing training and the Land Office should be shortly capable of handling a greater volume of work. The situation is nevertheless very far from satisfactory and it will probably be at least two years before applications for land will be dealt with as expeditiously as is desired. Plans to reorganize the Land Office and Survey Department are being considered and some reorganization has in fact already been carried out.

The great difficulty in recruiting officers with the necessary qualifications is however an almost insuperable obstacle to rapid improvement in the situation.

There is need for revision of the Land Code and it is hoped that a Bill will be introduced into the State Council in 1956, legislation is also required in order to permit land to be classified, but at the moment there is no recognition in law of customary tenure although in fact, very large areas are utilized in this way. A Land Classification Enactment would permit of greater security of tenure being granted in those areas where the traditional methods of land utilization are based on extensive as distinct from intensive cultivation and should also do much to prevent inflation in land values and speculative dealings in land in areas where development is considered likely.

The improvement in communications is creating a greater demand for land in outlying areas but development has not been as rapid as would have been expected since many of the people living in rural areas have preferred to seek employment for wages rather than to devote their efforts to primary production.

Land and Water Conservation and Utilization:

Road and River Reserves have been declared for all roads and navigable waterways. Grants issued subsequent to the Notification have made allowance for these but little progress has been made in carrying out mutation surveys in the case of titles issued prior to 1951. The work involved is enormous and the compensation payable amounts to a considerable sum.

During 1955 increase in the demand for labour for Public Works of various kinds has imposed considerable strain on the resources of agricultural labour. In the Tutong Road area practically every unskilled labourer employed on Public Works has been taken away from agricultural pursuits. The result has been that a certain amount of agricultural land was uncultivated. In addition to this a much larger area was only partially utilised. It is unlikely that the situation will alter during the next couple of years and one must expect a gradual diminution in the production from land in this area.

During the year it became apparent that the rate which land was being alienated demanded far more attention to planning than

had been the case in the past, particularly if it was intended to raise the standard of living of the agricultural community.

In October last His Highness the Sultan proposed that substantial funds be made available to assist Rural Development and suggested that particular attention should be paid to the possibility of raising the standards of living and increasing production by the introduction of a system of agricultural credit which over a comparatively long period would assist in increasing capital resources to farmers or agricultural workers.

An application was made to the Government of the Commonwealth of Australia with a request that they should, if possible, assist us in carrying out soil surveys in the State. The Australian Government promised to send an expert from the Division of Soils of the Commonwealth Scientific and Industrial Research Organization who would carry out preliminary surveys in order to advise on the methods we should follow. Dr. Stephens had not arrived at the end of the year, but was expected very early in 1956. At the same time Sir Bruce White, Wolf Barry and Partners, Consultant Engineers, with wide experience in Malaya, were carrying out surveys of the Mulaut, Kilanas and Sengkurong areas, with the purpose of advising us whether these areas could be used for drainage, irrigation and possibly for mechanical farming. Their preliminary report indicated that mechanical cultivation and proper drainage and irrigation methods could be used.

As the land had previously been alienated to the community, it became necessary to consult the people living in the area with the object of obtaining their agreement to revision of land boundaries and a surrender of old titles in consideration for the issue of new ones. The State Surveyor was appointed "Settlement Officer" for this purpose and spent a considerable amount of time on settlement work in the areas, despite very considerable opposition in the area. He had, by the end of the year managed to obtain a great measure of agreement to the settlement and revision of land boundaries being carried out.

Land Ownership:

During the year efforts were made to prevent further inflation in land values, yet our efforts were only partially successful.

The Survey Department increased the number of surveys very considerably over the previous year and to a great extent the back log in issuing of titles has been overcome. This has been very greatly appreciated by those people who had almost despaired of ever receiving a title to their land. It is necessary to emphasise, however, that the continuing difficulty has been in recruiting staff for providing as rapid an improvement as had originally been planned. At the end of 1955 the Survey Department was still sadly understrength. Also there were a considerable number of persons under training.

(b) AGRICULTURE

Weather:

Apart from the month of January the weather conditions were normal throughout the State till the end of May. From August to December heavy showers occurred resulting in flooding in many of the low lying areas and also land slides in certain areas in Brunei district. This year's records and comparisons with last year's figures are shown in Appendix "D".

CROP REPORTS

Rubber:

The efforts of Departmental Officers and the Rubber Inspectors to induce small-holders to prepare smoked sheet in lieu of unsmoked sheet met with very fair response. This was chiefly due to most of the small-holders, who were contented to sell their unsmoked sheets at lower price than what they should be entitled to. By selling unsmoked sheet extra care and labour were saved.

It can, however, be stated that the quality of small-holders' rubber has gradually improved generally during the year. As a result the interest to build smoke cabinets specially designed for small-holders are slowly diminishing throughout the State. *Prices*—In January the price was \$100 per picul, and from February the price declined at \$80 to \$90 per picul till June. In July an upward trend started, when prices stood at \$100 to \$125 per picul.

Diseases. Mouldy Rot (*Cerastomella Fimbriata*) was the only at all prevalent or of a serious nature in the State. There

were outbreaks in the riverine districts of Temburong and Tutong, particularly severe during the wetter months, but elsewhere outbreaks were of a comparatively minor nature and soon yielded to treatment.

The incidence of termites (*Coptotermes curvignathus*) remained approximately the same as in previous years. The Agricultural Department took over the 26 acre Rubber Nursery at Berakas Government Rubber Plantation towards the end of the year. The necessary budding of the seedlings were then immediately started. Out of 490,363 seedlings in the nursery 37,046 have already been budded and out of which 700 were sold to small-holders at 25 cents per stump.

There was a marked increase in export of rubber sheet during the year. A total of 1,442 tons being exported this year as compared with 882 tons last year.

Padi Season 1954/55:

The acreage of wet padi increase by approximately 132 acres, and the crop was also higher by 499,915 *gantangs*.

As compared with that of the 1953-54 season. Negligible pest damage and favourable condition appear to have been largely responsible for this increase.

The dry padi crop likewise compared unfavourably with that of the previous season, the planted area decreasing by some 1,111 acres and the crop being approximately 479,783 *gantangs* less. Most of the areas were planted late and became overrun with weeds.

Season 1955/56:

It is estimated that the total acreage of wet padi planted in the State is less than that of the previous season. This was chiefly due to the fact that most of the padi planters were employed on various jobs, for example, by the Public Works Department, contractors and British Malayan Petroleum Company as a result planting of padi was carried out only as a part time work.

Drainage and Irrigation Ditches:

Regular inspections of drainage and irrigation works have now been included in the routine duties of the Subordinate Staff and it is found that small repairs can often be attended to by the cultivators themselves before the damage reaches the stage when it would become necessary to employ skilled workers.

The following figures showed new construction and clearing of drains during the period under review:—

<i>District</i>		<i>New Construction in chain</i>	<i>Cost</i>	<i>Clearing of old drain in chain</i>	<i>Cost</i>
Brunei	...	774½	\$17,359.00	1,218	\$13,436.50
Kuala Belait	...	105	1,965.00	403	4,369.00
Temburong	...	139	2,680.00	35	525.00
Total	...	1,018½	\$22,004.00	1,656	\$18,330.50

Swamp Padi Surveys:

The Consulting Engineers Sir Bruce White Wolfe Barry and Partners completed the Preliminary survey of Lumapas and Mulaut during the year and presented a report and project plan for Lumapas. From this it seems likely that up to 2,100 acres could be developed as irrigated padi land in this area. The report and project plans for Mulaut were not ready by the end of the year, although all survey work had been completed, due to the need to investigate an alternative source of supply of irrigation water. Originally it had been intended to impound water in the upper Damuan valley but as there appeared to be considerable pollution from oil mining operations in that area, it was decided to base plans for development of the Mulaut area on water from the Limbang river in Sarawak.

Sago:

The area under this crop remained the same as in previous year. The total output of raw material during the year was 2,517 piculs and out of which 247 piculs were exported to neighbouring territory. The remainder being consumed locally chiefly by the peasants. Manufacture of raw sago continued to be a profitable minor industry. Hand labour is used throughout in the manu-

facture. The bye-product usually sold to pig rearers for feeding purposes.

Coconuts:

The estimated acreage under this crop at the end of the year was 1,999 acres as compared with 1,648 acres in 1954. The major portion is grown in the districts of Brunei, Tutong and Temburong. The growers chiefly Malay small-holders except Temburong district where a Company has planted 351 acres with the aid of Government loan to start this industry.

All the nuts produced are used for local consumption and no attempt to manufacture copra is made owing to scarcity of nuts.

Squirrels did certain damage to young and matured nuts.

Fruits:

The total area under fruits in the State is estimated to be 1,561 acres, of which, 1,048 acres were in mixed cultivation.

The mid-season crop was a good one in so far as the majority of the local types of fruit were concerned. *Membangan, langsung, durian, rambutan, belunu* and *Kambayau*, in particular, were available in considerable quantities.

There were 15 village fruit nurseries in Brunei district during the period under review which were made up as follows:—

Kilanas	1
Sengkurong	4
Jalan Muara	7
Tutong	2
Kuala Belait	1
	<hr/>
	15
	<hr/>

MARKET GARDENS

The area under vegetable gardening remained the same as in previous year's. Most of the gardens were being maintained and cultivated. The Chinese still continued to be the main producers, especially near the towns. vegetable cultivation amongst the Malay small-holders continued to make slow but steady headway

and many of the smaller and more remote villages are now self-supporting.

AGRICULTURAL AND PADI TEST STATIONS

Agricultural Station, Kilanas:

The growth of the permanent crops continued to be satisfactory. Fair crops of *rambutans*, *pulasan*, mangosteens, bananas and citrus were harvested.

Most of the area was kept under *Calopogonium* covers. The most successful fruit crops were grown with dressings of cattle droppings and artificials before flowering.

Good progress was maintained during the year. Replacement of some of the permanent crops was completed, while annual crops were grown in rotation. An additional plot of 4,900 sq. ft. was brought into cultivation to allow extension of the nursery area for budding work. Considerable quantities of planting materials were distributed from the Station to other Agricultural Stations, School gardens and local cultivators. The distributed planting materials consisted of the following:—

Rambutan (budded)	485
Rambutan (seedlings)	1,129
Pamello (marcotts)	39
Orange (marcotts)	197
Lemon (marcotts)	11
Lime (marcotts)	15
Pulasan (budded)	7
Sapodilla (marcotts)	2
Jambu mawar (marcotts)	17
Coffee (seedlings)	117
Papaya (seedlings)	290
Durian Belanda (seedlings)	88
Orange (seedlings)	23
Manggis (seedlings)	43
Coconut (seedlings)	8,670

Cattle, Buffaloes and Goats:

Breeds of various animals which would be of economic importance to this country are kept so as to serve as a demonstration centre to the farmers. Saanan goats are now in an excellent condition and have become acclimatised to this country. These milch goats have very great possibilities for milk production in this country and can easily be maintained by farmers with a little extra care.

Local goats and buffaloes maintained their usual good record.

Poultry:

As a result of instructional work and example set by Agricultural Subordinates the demand for pure bred poultry has exceeded the supply. In November, 945 day old chicks were ordered from Australia for raising at this Station. These will be segregated and penned for breeding purposes. Surplus cockerels, for which there is a good demand, have already booked by small-holders. The work, however, was severely hampered during the later part of the year on account of the very poor laying and fertility of the pure-bred parent stock. The health of the stock was excellent, and few losses occurred in spite of severe outbreaks of disease in the neighbouring holdings.

Season 1954/55:

There were 15 varieties being planted in the usual multiplication plots during the seasons. Although the season was a good one the crops were slightly below average owing to minor pest damage coupled with unsuitable condition just before harvest was commenced.

Season 1955/56:

The 1955-56 programme included (a) Varietal trials (b) manurial experiments and (c) multiplications.

(a) One five-way Latin Square was laid down, comprising the following varieties:—

Engkatek, Langsat Puteh, Siam 29, Trengganu and Langsat Kuning.

(b) The five by five Latin square was laid down to test a mixture of lime, phosphate and sulphate of ammonia sug-

gested by the Director of Agriculture, Sarawak. The varieties used were *Engkatek*, a new short strawed type from Sarawak and *Langsat puteh* one of the most popular local types. The first application of the treatments was a month after transplanting and the second treatments broadcast just before flowering. Very marked advancement in growth and earlier ripening is apparent when compared with other adjoining untreated areas.

(c) All land not utilized for experiments has been planted with various strain types for multiplication purposes. Transplanting was completed during the month of November. Prolonged flooding necessitated replanting of certain areas. At the end of the year the crop was doing well and was free from much damage from rats and other pests.

Wet Padi Mechanical Cultivation Scheme, Mulaut:

Season 1955/56: The experiment on wet Padi mechanical cultivation was started by the Consulting Engineers but they were greatly handicapped by the delays in the supply of equipment. Progress was, as a result, rather disappointing but towards the end of the year it was possible to commence trials of cultivating equipment, using the cable bantam technique, with one track laying tractor that had arrived and a drag-line excavator intended for canal construction work.

In preparation for harvesting trials when the second tractor arrives 15 acres of padi (4 different varieties) was planted accurately by hand and will be harvested mechanically. Transplanting and further cultivation trials will be possible out of season when full equipment arrives and the water control over the experimental area has been secured.

Padi Test Plot, Lumapas:

Season 1954/55: The whole of the five acre plot has been planted with various pure strain types for multiplication purposes. At the close of the year rats had been the only pest resulting in any material damage. Control measures have been adopted, but uncultivated areas have minimized results. Growth over the majority of the area is quite average for the district.

Season 1955/56: Work are continued on similar lines to previous years and consisted of large multiplication plots of local and imported selected varieties which were grown to provide seed for distribution to local padi planters.

Heavy rains fell shortly after transplanting and flooding occurred in all areas in the district. Fortunately the flood waters subsided quickly and, only slight damage was occasioned to the transplanted seedlings.

Agricultural Station, Birau:

Very satisfactory progress was made by most crops, viz:—liberian coffee, pepper, citrus, *rambutan*, *pulasan*, bread fruit, *jambu ayer*, oranges, pomelo, jack-fruit, soursop, cocoa, bananas and illipe-nuts.

No further land from the reserve was brought under cultivation.

Food crops grown during the year, cuttings and seeds from which were distributed to small-holders were groundnuts, sweet potato, maize and yams. Citrus marcots, papaya seedlings, pineapple suckers, betel-leaf cuttings and calopogonium seeds were also distributed to other districts and stations.

Considerable attention was paid to drainage problems in the various plots during the year. On one occasion towards the end of the year flood waters inundated the low-lying portion of the Station and caused considerable damage to growing crops particularly the vegetable garden.

Horticultural Garden, Jalan Istana:

This garden served a useful purpose to the public in the way of supplying ornamental trees, shrubs and plants to Government Officers' residences and public gardens. All the materials issued or supplied were charged for. The area is now being fenced in. A proper potting shed is also in the course of construction.

The following planting materials were distributed or issued during the period under review:—

Begonia splendens	8 plants
Bougainvillea sp.	52 plants
Galadium bicolor	23 plants
Canna sp. & var	102 plants
Chrysanthemum sp.	10 plants
Crossandra undulaefolia	6 plants

Dahlia sp. var	3 plants
Dieffenbachia sp.	8 plants
Gaillardia sp.	4 plants
Galphimia glauca	18 plants
Gardenia florida	3 plants
Hydrangea	24 plants
Hibiscus rosa senunsis	26 plants
Ipomea digitata	6 plants
Lantana camara var	18 plants
Nerium olander	4 plants
Nyamphaea Lotus & var	9 plants
Plumeria sp.	5 plants
Rose	14 plants
Salvia splendens	25 plants
Sansevieria frifsciata	6 plants
Spathoglottis plicata	2 plants
Thunbergia erecta & sp.	10 plants
Turnera trionaefflora	4 plants
Typhonium trilobatum	2 plants
Casaurina sumatrana	66 plants
Dacrudium elatum	8 plants
Delonix regia	4 plants
Peltophorum ferrugineum	15 plants
Spathodea campanulata	4 plants
Total	489 plants

(c) ANIMAL HUSBANDRY

Animal Breeding Farm, Jerudong:

This station is steadily gaining progress as more and more developments are taking place. More of scrub-land was fenced off as pasture.

Experimental paddocks for testing the stock carrying capacity has been completed. These are divided into 13 half acre plots, each planted with different grasses and legumes both foreign and indigenous. The following are used for trial:—

- (1) Guinea Grass (*Panicum maximum*)
- (2) Molasses Grass (*Melinis minutiflora*)
- (3) Carpet Grass (*Axonopus affinis*)

- (4) Bahama Grass (*Cynodon dactylon*)
- (5) Kampau
- (6) Batong Batong
- (7) Galagah Tikus
- (8) Sesik Buayu halus
- (9) Sesik Buayu kasar.

The results of these tests will only be available in a few years. From these experiments we hope to obtain the grass most suited to the soil and climate and which would permit a large number of animals to be kept at a minimum of concentrates.

Sindhi Cattle: Two bulls and 6 cows were introduced into this farm in May, one bull is used to grade up local cattle at the farm and the other to maintain a pure herd. Two bull calves and 1 heifer calf were born in the farm, of which 2 are in excellent condition. The first Sindhi cross bred calves are expected next year. From observations made, the Sindhis are doing fairly well.

*Bali Cattle (*Bos Sondaicus*):* These domesticated Banteng are in an extremely fine condition and seem to thrive on very rough grazing. These hardy species seem to be ideal for beef production in this country from observations made at the Station.

Local Cattle: These are in a fair condition. Two breeding bulls have been loaned to Labu Estate and His Highness herd.

Swamp Buffaloes: The hardy local buffaloes continue to be in excellent condition. Three bulls are used for work in the farm.

Goats: These continue to be in excellent condition. The private herd to His Highness maintained in Jerudong are in a fair condition. A total of 2,933 pints of milk were produced in the farm with only one milking. The calves being allowed to suckle all the milk in the later part of the day.

General Animal Husbandry in the State:

Buffaloes: The annual stock census showed that there were 11,389 buffaloes (a decrease of 128) as compared with 11,517 heads last year. During the off-season, the stock graze on the padi stubble and are generally in better condition as a result.

This practice has its drawbacks, however, as it is highly probable that the animals take more from the land than they put back, thereby entering into direct competition with the padi crop for the supply of soil nutrients; also buffaloes being heavier animals do considerable damage to bunds and water courses.

Cattle: At the end of the year the cattle population was 1,433 and this figure showed a slight increase compared with the previous year. The health of the local animals in general was quite satisfactory. There was no death of animals which could have been caused by serious disease.

Goats: The total number was estimated at 771 an increase over last year's figure. Interest in rearing these animals still being maintained during the year by the local peasants. Most of the goats were kept in free range grazing and there was no report of outbreaks of any serious disease amongst the animals.

Pigs: Attempts to grade up the local breed of pig, by crossing with the Middle White Breed, has been a failure owing to suitable boars not being available. Pig rearing in the State are all in the hands of Chinese, *Dusuns*, *Muruts* and Dyaks.

Poultry: There was an increased interest in poultry keeping throughout the State during the year. Small flocks were started in one or two of the Malay Schools. The demand for pure and cross-bred cockerels for crossing with local hens was greater than the supply. On the whole these pure-bred have done sufficiently well under *kampong* conditions to induce more enlightened keepers to destroy their local cockerels and to use only improved stock.

Agricultural Credit Schemes & Subsidies:

Although quite a number of applications for loans were received for Agricultural purposes, but none was approved till the end of the year owing to some misunderstanding between the borrowers and the Government.

The policy of sale of barbed wire at 50% of cost to owners of buffaloes to fence their communal grazing grounds were still in operation. There were 1,300 rolls of barbed wire issued.

Agricultural Show:

An Agricultural Show organised on a State basis was held at the Sultan Mohamad Jamalul-Alam Malay School, Brunei, on 20th August, and was formally opened by the *Yang Maha Mulia Raja Istri* of Brunei. The Show was a success and attracted some 1,000 people during the one day. Entries in all classes were fairly satisfactory.

The usual special section of Silverware, Brassware and Arts and Crafts were exhibited, and prizes for these were awarded by the Commissioner-General, South East Asia.

A departmental stand on which various Agricultural produces were also exhibited. This has proved to be the chief attraction of the show.

Visitors:

There were 1,163 visitors to the Agricultural Stations during the year. Amongst the notable visitors as hereunder:—

His Highness the Sultan of Brunei

The Raja Isteri

B.P. Behandar D. P. Pemancha

Mr. G. W. Nye, Colonial Agricultural Adviser

Mr. R. W. R. Miller, Director of Agriculture, Sarawak

Mr. J. L. Greig, Director of Agriculture, North Borneo

Mr. Song Thian Siang, Agricultural Officer, Miri.

Administration:

Mr. F. J. Harper, Deputy Director of Agriculture, Sarawak, officiated as State Agricultural Officer until the 5th August, 1955, when he was relieved by *Inche* Hamidoon bin Awang Damit for the remainder of the year. Mr. F. J. Harper still being retained in the State as Deputy Agricultural Adviser. His assistance and advice on the Wet Padi Mechanical Cultivation Scheme at Mulaut was being sought till the end of the year.

Three students were sent to the College of Agriculture, Malaya, to undergo the one year course. The Agricultural Assistant (*Inche* Hamid bin Ja'afar) left for Australia towards the end

of the year to take up the 3-year diploma course at the Gatton Agricultural College, Brisbane, Australia, under the Colombo Plan.

A seconded Assistant Veterinary Officer (Mr. A. K. Sundram) from Sarawak reported for duty on the 28th December, 1955, and he is now attached to the Agricultural Department.

The staff of the Agricultural Department at the end of the year consisted of:—

- 1 State Agricultural Officer
- 1 Assistant Veterinary Officer
- 2 Agricultural Assistants
- 11 Agricultural Field Officers
- 9 Agricultural Field Inspectors
- 2 Probationers
- 1 Special Grade Mechanic
- 4 Drivers
- 2 Clerk Grade B
- 1 Clerk Grade A
- 1 Peon

(d) FORESTRY

(Figures for 1954 are given in brackets after figures for 1955)

INTRODUCTION

Certain facts place the Brunei forest department in a unique position compared with others in the Commonwealth. These facts need to be emphasised because they are fundamental to an understanding of forestry in Brunei. They are—

- (i) Freedom from pressure on the land. Fifty thousand persons inhabit 2,226 sq. miles of the State; 75% is under high forest.
- (ii) Freedom from pressure on the forest. The present cut is far below the potential cut on a sustained yield.

- (iii) Indifference to revenue. The State's revenues from the oil industry are sufficient for current expenditure and for development. The policy is therefore not to squeeze every cent out of the forests at the present time, as most States are compelled to do in order to balance their budgets, but rather to conserve and develop the forests against the day when the oil wells start to run dry.

Total area of State	Forest Reserves	Stateland Forests	Secondary Forests	Agricultural and residential areas
Sq. Miles 2,226	938	740	456	92
%	42%	33%	21%	4%

Forest Reserves:

These are intended to be kept under high forest in perpetuity, and to form the permanent forest estate. The list of forest reserves is given in Appendix "E" and their position is shown on the map at the end of this report.

The development of the Government gravel quarry on the coast at Berakas, and of access roads thereto, resulted in the clearing of a good deal of forest in the Berakas forest reserve; it was therefore decided to excise the area affected, and to extend the reserve westwards along the coast. A preliminary notification describing the proposed new boundaries of the reserve was published in September.

State land forests:

These also belong to the Government but will tend to disappear as the land is alienated for other purposes or cleared for shifting cultivation.

Secondary forests:

These consist of secondary growth or bush fallow, varying in age from 1 to 40 or 50 years, on land that has been cleared of its virgin forest for shifting dry padi cultivation. The land is still owned by the Government, but the person who originally clears the virgin forest has the right to cultivate dry padi on the land subsequently, under native customary law.

2. MANAGEMENT OF FORESTS

A 10-year plan 1955-64 for the management of the forests of Brunei was approved by the State Council on the 28th February, and printed copies are available from the State Forest Officer. It includes a description of the forests, with areas covered by the various forest types, and a detailed statement of the Government's policy for both forest reserves and state land forests. It is considered that adequate areas of forest have been reserved for the time being, and the plan calls for management of the reserves on the basis of sustained yield by working circles.

The plan was circulated in draft, before submission to the State Council, to the Forest Adviser, to the High Commissioner for Brunei and also to the Forest Adviser to the Secretary of State for the Colonies, and their valuable suggestions incorporated in the final draft.

Maps:

A Delft scanning stereoscope, purchased early in the year, proved most useful in preparing 1:25,000 maps of forest reserves, particularly in the *ulu* Belait, *ulu* Tutong, and *ulu* Temburong areas. All forest reserves are now for the first time covered by maps on this scale, all compiled and drawn in the forest office.

3. SILVICULTURE

Silvicultural treatment after fellings continued in the Anduki forest reserve, where the work was brought up to date. Similar treatment will be extended to the Andulau forest reserve as soon as exploitation in the first compartment (No. 5) has been completed. The treatment consists in poisoning all unwanted trees with sodium arsenite.

4. COMMUNICATION

The proposal to clear the Belait river of snags, mentioned in last year's report, has now reached the stage of calling for tenders for the work.

5. PROTECTION OF FORESTS

Maintenance of boundaries:

Batu Apoi forest reserve. The boundary rentis from the *Sungai Batu Apoi* northwards to the boundary ridge was cleared.

Labu forest reserve. All rentises were cleared, except the Sarawak-Brunei boundary rentis which was done last year.

Belait peat swamps. The Sarawak-Brunei boundary rentis was cleared from the Pagalayan Canal to the sea.

Forest offences:

No important forest offences were detected during the year.

6. FOREST INDUSTRIES

The four main forest industries in the State are—

- (i) the timber industry;
- (ii) the firewood and charcoal industry;
- (iii) the *jelutong* industry;
- (iv) the minor forest products industry (rotans, leaf *ataps*, *damar*, etc.).

Timber industry:

The industry concentrates on supplying the internal market, which is dominated by the 700 cubic tons per month (average) requirement of the British Malayan Petroleum Company, mostly in the Seria-Kuala Belait oilfield area. Government contractors also buy large quantities of timber for the numerous buildings under construction by the Public Works Department. The industry is unable to meet the full requirements of the market, largely for want of an adequate and reliable labour supply, and in consequence about half of the timber used is imported (chiefly from Sarawak).

Timber prices in the oilfield, which controls the market, remained much the same as over the two preceding years:—

	<i>\$ per cu. ton</i>
Selangan batu (c.i.f.)	330
Kapor bukit (f.o.b.)	170
Kapor paya (f.o.b.) 18' and under	130
Kapor paya (f.o.b.) 20' and over	140
Keruing (f.o.b.) 18' and under	170
Keruing (c.i.f.) 18' and under	178
Semayor (c.i.f.) 18' and under	178
Meranti (f.o.b.) ex Marudi, Weston	110
Seringawan (f.o.b.) ex Badas	110
Sempilor (f.o.b.) ex Lawas	110

The British Malayan Petroleum Company kindly supplied the above figures; other species are very rarely purchased by them.

Sawmills:

No sawmill may be installed without a permit from the Forest Department; such permits are always linked with a licence for a suitable area of forest. There are 23 sawmills in the State, but many of these are one-bench mills, driven by a petrol engine (such as a Ford V8) or a light diesel engine, and move about periodically from one patch of State land to another. At least seven of these small mills are either moribund or struggling hard to keep going; in general, experience has shown that it is difficult for the small up-river mill to compete with the larger mills at Belait and Tutong unless either they are cutting a valuable timber (e.g. semayor or selangan batu) or they are very accessible to the market (e.g. Liew Kim's small mill in Anduki forest reserve). Needless to say it is the moribund mills that apply to Government for large financial loans, in the hope that a shot in the arm will keep them going a year or two longer.

Chinese hand-sawyers continued to demonstrate that they can compete successfully with sawmills, and a small but steady outturn of valuable timber cut by them comes out of the Kuala Abang road forests.

The two mills in Kuala Belait are being equipped with electric motors, and will go over to electricity as soon as Government can supply the power. The most recent of these two mills, belonging to the Shing Yip Co., is expected to be completed in April 1956, and will have a capacity of 15 tons sawn output per day; if their logging organization can provide enough logs, this mill should go a long way to meeting the demands of the Seria-Kuala Belait area. It is hoped that the clearing of the Belait river, to be undertaken by Government during 1956, will materially assist these two sawmills.

Timber:

	<i>Outturn in cu. ft.</i>	
	<i>1955</i>	<i>1954</i>
Forest reserves, round logs	147,102	(133,491)
Forest reserves, sawn timber	128,562	(115,134)
Other forests, round logs	424,110	(486,977)
Other forests, sawn timber	113,851	(123,221)

These figures are summarised from the statement in Appendix "G". There is no significant difference between the figures for 1954 and 1955. Where convenient, all logs are measured in the round before milling, but where this is impracticable as, for example, in some of the small mills upriver, the timber is measured for royalty after sawing. It is for this reason that our statistics are partly in terms of round timber and partly of sawn timber.

Poles:

	<i>Outturn in cu. ft.</i>	
	<i>1955</i>	<i>1954</i>
Mangrove poles	47,330	(29,202)
Junglewood poles, taken by B.M.P. Co.	9,478	(15,607)
Junglewood poles (Misc.)	4,417	(24,233)
	<hr/> 61,225 <hr/>	<hr/> (69,042) <hr/>

Firewood:

(a) *Mangrove.* Production of mangrove firewood was 396,120 (408,678) cubic feet. Of this total 9,693 (11,518) shipping tons was exported to Hong Kong by the George Ah Foott Firewood

Co. Ltd., who state that the drop in production is due to labour difficulties. The Hong Kong price for firewood fluctuates considerably, and during 1955 the price received ranged from Str. \$21.85 down to Str. \$7.56 c.i.f. with an average of Str. \$13.54.

The use of *nyireh bunga* firewood for firing the Soon Lee brick kilns at Sengkurong continued during the year.

(b) *Other firewood.* Production of firewood other than mangrove totalled 62,371 (48,484) cubic feet. This was mostly produced in the Tutong district for firing the Soon Lee brick kilns at Sengkurong; it is more expensive than *nyireh bunga* firewood, but sufficient supplies of the latter cannot always be obtained owing to labour shortage in the mangrove forests.

Charcoal:

Seventeen kilns produced 38,844 (34,558) cubic feet. The market for charcoal is limited, and it is doubtful whether it can absorb much more than the present production, which goes mostly to coffee shops in the towns. The local manufacturers are unable to compete with the highly organised Malayan industry in the Hong Kong market, and there are no exports.

All the kilns are sited on Pulau Berbunut, and burn mangrove wood exclusively; *bakau* (*Rhizophora* sp.) is used for making the charcoal, but for firing the kilns other species can be used. As one *pikul* of charcoal is roughly equivalent to 9 cubic feet, the outturn for the year was about 4,300 *pikuls*.

Jelutong:

Production of *getah jelutong* totalled 3,690 (2,566) *pikuls*. The swamp forests of the Belait and Tutong districts, and the Labu forest reserve, are the principal areas in which this product is obtained; it provides part-time employment for many persons living in rural areas, and yields one-quarter to one-fifth of the total forest revenue each year.

Minor forest produce:

Appendix "H" gives details of returns from minor forest produce. Not appearing therein (because no royalty is charged) is an item of 814 *pikuls* of illipe nuts (fruit of *Shorea* spp.) exported, on which the Customs Department collected duty.

7. IMPORTS AND EXPORTS

There was no export of timber during the year. Export is prohibited because the timber trade is at present unable to meet the demand for timber within Brunei State, as the following paragraphs illustrate. Figures for exports of mangrove firewood and *jelutong* are given in previous paragraphs.

Imports:

(a) *Belian ataps (shingles)*. These are the traditional roofing material in Borneo, and are mostly obtained from Bintulu in Sarawak, but export from Sarawak to Brunei is only permitted by the Sarawak Government against indents issued by the P.W.D. Figures for imports in 1955 are not yet available.

(b) *Timber*. The Department of Trade and Customs, Sarawak, annual statistics for the year 1954 show the following sawn timber exported to Brunei:—

Type	Quantity in tons of 50 cu. ft.
Lumber, conifer	974
Lumber, ramin	100
Lumber, meranti	7,966
Lumber, belian	146
Lumber, hardwoods	2,572
Lumber, non-conifer not elsewhere specified	966
	<hr/> 12,724 <hr/>

Production of lumber within the State during the same period is estimated from Appendix "G" of the Brunei 1954 Annual Report at 11,360 tons in terms of sawn timber (assuming 50% recovery on conversion of round timber). In other words, in 1954 the timber trade in Brunei was producing less than half the total internal requirements, and it is thought that the 1955 figures when available will show a similar pattern. Some lumber is also imported from British North Borneo and from Singapore, but the quantities are small by comparison.

Sarawak forest department 1955 statistics show that the export of timber to Brunei from Sarawak Fifth Division ports (chiefly Lawas, to a lesser extent Limbang, Sundar, Trusan)

totalled 56 (144) tons of round timber and 2,371 (2,902) tons of sawn lumber during the year. This includes 79 tons of conifer timber (*sempilor*).

8. RESEARCH

1955 will go on record as one of the heaviest and most general flowering and fruiting years of the family *Dipterocarpaceae*; this was probably consequent on an unusually dry spell in February and March. Some valuable botanical material was collected by all ranks of the forest staff. The State Forest Officer visited the Forest Research Institute at Kepong during February for 10 days to study all the Brunei material available in the herbarium there; discussions with the Director of Forestry and the Forest Botanist led to a recommendation that Brunei should employ a qualified botanist for at least 5 years to produce a manual of the timber producing species on the lines of Symington's "Forester's Manual of Dipterocarps"; without such a manual scientific forestry and sound silviculture cannot make much progress. A check-list of all known Brunei dipterocarps has been drafted in typescript by the State Forest Officer as a basis for future work.

9. EDUCATION

As usual, Brunei sent one student to the Forest School for the one year vernacular course. Forest Guard Yahya was placed 28 out of 60 in the final examination, obtaining a pass certificate; he also received a good report from the Instructor.

10. FINANCIAL RESULTS

A summary of revenue and expenditure for the year is given below:—

Year	Revenue	Expenditure			Surplus
		Personal Emoluments	Other Charges	Total	
1955	120,492	72,096	32,635	104,731	15,710
1954	128,633	61,498	38,352	99,850	28,783

Details of revenue from different classes of forest produce are given below:—

<i>Kind of Produce</i>	<i>Revenue 1955</i>	<i>Revenue 1954</i>	<i>Increase or Decrease</i>
Timber and poles	65,639	82,564	16,925
Firewood and charcoal	13,263	15,504	2,241
Jelutong	38,818	30,349	11,011
Minor forest produce	2,542		
Other sources	179	111	68
Compensation and fines	—	105	105
	<hr/> 120,441 <hr/>	<hr/> 128,633 <hr/>	<hr/> 8,192 <hr/>

The drop in revenue was principally in the Belait district, where the Anduki forest reserve has almost been worked out. It is hoped that this trend will be reversed in 1956 by the two sawmills in Kuala Belait, both of which are enlarging their mills with more modern equipment. The clearing of the Belait river should make it easier for them to obtain adequate log supplies from their licenced areas in the very extensive forests of the upper Belait.

11. ADMINISTRATION AND GENERAL

Mr. B. E. Smythies, Assistant Conservator of Forests, held the post of State Forest Officer for the third year in succession, in addition to the post of Section Forest Officer, Limbang and Lawas sector, Sarawak. In order that he might be available to see the Forestry Development Plan through the State Council and the Press, an offer of the post of acting Conservator of Forests, Sarawak, was declined.

The staff of the department at the end of the year consisted of—

- 1 State Forest Officer
- 1 Chief Clerk
- 3 Assistant Clerks (Brunei, Tutong, Kuala Belait)
- 3 Forest Rangers (Brunei, Tutong, Kuala Belait)
- 6 Foresters
- 13 Forest Guards

- 7 Forest Labourers
- 1 Driver/Boatman
- 1 Draughtsman
- 1 Office *Peon*

The forest labourers, as in Malaya, are monthly-paid non-establishment personnel; vacancies of forest guard are normally filled from their ranks.

Conferences:

The State Forest Officer attended the annual conference of Sarawak forest officers in Kuching, 1-5th February.

He represented Brunei at the first forestry conference of the three Borneo territories, held in Sandakan 14-19th November; this included a two-day excursion to the Sepilok forest reserve to study silviculture and management.

Visitors:

Professor H. G. Champion, C.I.E., I.F.S. (retd.) Professor of Forestry at the University of Oxford, paid a brief visit in January and was shown the mangrove workings in Selirong forest reserve and the *kerangas* forest in Berakas forest reserve.

Legislation:

During the last quarter the Forest Rules were revised and reprinted. The explanatory note printed at the end of the new Rules is quoted below:—

“The Forest Rules, 1935, were based on the Forest Rules in force at the time in the Federation of Malaya. The latter have since been revised more than once, and the latest revision, in draft form, has been used for the revision of these Brunei rules, which are a simplified version of the Malayan ones. It was also considered desirable at the present time to have the rules reprinted so that they should be available to the public, and it was decided to revise them prior to reprinting.

The principal change in these rules is that royalty on all minor forest produce other than *jelutong* and other *getahs* and rattans is waived, and it is no longer necessary for the public to

obtain a licence to work bamboos, *damar*, leaves (*kajang*, *mengkuang* leaves, *mengkuang* mats, *nipah* leaves, *nipah atap*, *pandan* mats; *rumbia atap*), or *nipah* sugar.

The timber roll in Schedule I has been simplified by reducing the number of classes to two, as against four previously.

The old rules required sawmills to be licenced, but no form was prescribed. The Sarawak form is now prescribed, and a charge of \$20 per saw-bench introduced, as in Sarawak."

The reason for waiving royalty on minor forest produce was that the royalty obtained was negligible (see Appendix "H") but entailed a good deal of office work in district forest offices.

The new rules will come into force on 1st January, 1956.

(e) FISHERIES

The principal fishing areas of the State of Brunei are mostly coastal in the vicinity of river mouths and estuaries, or near coral beds and rocky patches, and while in previous years the Industry has depended almost wholly on these inshore grounds, the introduction and extensive use of outboard engines, originally purchased on interest free Government loans to the individual fisherman, has in 1955 enabled the Industry to extend its activities to the nearer offshore grounds with very gratifying results.

The mechanization of the fisherman with outboard engines commenced in the latter half of 1953, and although 1954 was the transitional period an immediate increase in the annual production was apparent. In 1955, with practically the whole of the Industry mechanized and only the very small one or two man *perahus* (canoes) still using hand paddles as a means of propulsion, the benefits derived from the use of engines became obvious as the following tables will show.

	1953	1954	1955
Total landings of Fish (all grades)	2,264.45	3,429.99	9,115.38
Prawns	589.38	921.45	1,008.80

These figures are given in the local weights of *pikuls* and *katies* that is 1 *pikul* (100 *katies*) is equal to 133½ lbs.

All fisheries in the State of Brunei are seasonal and methods of gears used vary accordingly. In 1955, however, a marked increase in the all year round use of the 'Bubu' is noted, and is

State Banquet,
Secretary of
State for Colo-
nies' visit.



of State for
Colonies and
H.E. the High
Commissioner
for Brunei on
arrival in Brunei.



(Information Service
photograph)

Weaving, Kam-
pong Ayer
Brunei.



(Information Servi
photograph)

PART II.

CHAPTER I.

POPULATION

Distribution of Population:

THE bulk of the people in the State of Brunei live in the two main urban areas, namely, Kuala Belait/Seria and Brunei Town. The former area covers the British Malayan Petroleum Company Oilfield, while Brunei Town is the Government Administrative Centre. The population in these two areas is cosmopolitan.

The remainder of the population lives along the coast or along the banks of the three main rivers. The Malays are concentrated along the coastal strip and up the first few miles of the rivers. The character or distribution of the races up these rivers follows a fairly common pattern i.e. in the lower reaches Malays, then in the following order as one proceeds upriver—*Kedayans* and *Dusuns*; *Muruts* and finally *Ibans* (Dyaks). In one area (*Ulu Belait*), there is to be found, but only after careful pre-arrangement, a small group of *Punans*—the real jungle people. In the world famous *Kampong Ayer* (Water Village) over the river at Brunei Town, about 9,000 Malays live very much as they did several hundred years ago.

Estimation of Population:

In 1947, the year of the last census, it was reckoned that 40,670 persons lived in the State of Brunei in an area of 2,226 sq. miles, thus giving a density of population of 18.2 persons per sq. mile. Further details carried out during 1947 gave the various racial groupings as following:—

Malays (Brunei)	...	...	49.00%
Kedayans	...	...	17.00%
Dyaks	...	...	3.50%
Muruts	...	...	0.50%
Dusuns	...	...	7.00%
Chinese	...	...	19.00%
Indian	...	...	1.50%
Europeans	...	...	1.50%
Others	...	...	1.00%

Since 1947 it is estimated that the population has increased gradually until the figure of 60,770 was reached in 1954. During 1955 23,598 males and 10,159 females entered the State, a total of 33,737; on the other hand, 22,014 males and 9,433 females left the State giving a total of 31,447, or a gain of 2,290 persons by immigration. In addition to this the births totalled 3,600 and the deaths 878. The nett gain in population of the State was, therefore, 5,012, thus bringing the total estimated population to 65,342. This figure is an approximate one only.

Registration of Births and Deaths:

Births and Deaths Registration was introduced in 1922. The State Medical Officer is the Registrar of Births and Deaths. Deputy Registrars comprise Hospital Assistants in-charge of outstation Dispensaries, District Officers, *Ketuas* of *Kampongs* and Chinese Headmen. Other than in the three main Hospitals, the accuracy in connection with Births and Deaths cannot possibly be guaranteed. It has been noted however, that the outstation Deputies are doing more and more in an endeavour to keep proper records. In time to come, a separate Registration Office with trained outstation personnel may be established.

The following tables breakdown the figures for Immigration, Births and Deaths as indicated:—

TABLE I.

IMMIGRATION.

<i>Nationality</i> (In Alphabetical order)	<i>Entering</i>		<i>Leaving</i>		<i>Nett</i>
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	
American	44	14	41	13	+ 4
British Indigenous	1,299	457	1,282	443	+ 31
British Dyaks	1,500	210	1,289	196	+ 225
British Malays	6,355	3,339	5,765	3,049	+ 880
British Non-Indigenous	451	238	399	205	+ 85
Burmese	38	35	34	29	+ 10
Chinese (British & Aliens)	11,612	5,131	11,027	4,836	+ 880
Dutch	230	120	290	126	— 66
French	14	4	10	2	+ 6
Indian & Parkistanis	944	172	963	151	+ 2
Indonesian	98	46	135	39	— 30
Swiss	15	3	15	4	— 1
Others	978	390	764	340	+ 264
GRAND TOTAL	23,578	10,159	22,014	9,433	+ 2,290

TABLE II.

DEATHS GROUP ACCORDING TO AGE, SEX, NATIONALITY.

Deaths by Age Groups	Sex	Europeans	Eurasians	Chinese	Malays	Indians	Native Bornean Races Other Than Malay	Others	Total
0 Weeks	M	—	—	16	174	—	26	—	216
	F	—	—	9	111	—	33	—	153
1 Year	M	—	—	6	52	—	9	—	67
	F	—	—	6	57	—	7	—	70
5 Years	M	—	—	2	4	—	—	—	6
	F	—	—	4	5	—	4	—	13
10 Years	M	—	—	—	9	—	1	—	10
	F	—	—	1	11	—	2	—	14
15 Years	M	—	—	2	4	1	6	—	13
	F	—	—	—	6	—	2	—	8
20 Years	M	—	—	1	3	—	3	—	7
	F	—	—	—	4	1	3	—	8
25 Years	M	—	—	—	12	—	1	—	13
	F	—	—	—	22	—	3	—	25
30 Years	M	—	—	1	6	—	3	—	10
	F	—	—	3	10	—	1	—	14
35 Years	M	—	—	2	12	—	2	—	16
	F	—	—	—	11	—	5	—	16
40 Years	M	—	—	3	4	1	4	—	12
	F	—	—	—	8	—	4	—	12
45 Years	M	—	—	3	6	—	2	—	11
	F	—	—	2	4	3	1	—	10
50 Years	M	—	—	1	6	—	2	—	9
	F	—	—	3	8	—	2	—	13
55 Years	M	—	—	15	44	—	9	1	69
	F	—	1	7	42	—	13	—	63
Total Deaths	M	—	—	52	336	2	68	1	459
	F	—	1	35	299	4	80	—	419
TOTAL	MF	—	1	87	635	6	148	1	878

TABLE III.

BIRTH REGISTERED ACCORDING TO SEX AND NATIONALITY.

Sex	Europeans	Eurasians	Chinese	Malays	Indians	Native Bornean Races other than Malay	Others	Total	Total Both Male and Female
Male	17	11	519	857	47	396	26	1,873	
Female	19	6	454	845	49	332	22	1,727	
Total	36	17	973	1,702	96	728	48	3,600	3,600

TABLE IV.

DEATHS REPORTED BY DEPUTY REGISTRARS.

Certified by Medical Practitioners ...	...	...	...	...	152
Certified by Registering Officers after Death	...	...	...	...	278
Uncertified	...	...	...	...	448
GRAND TOTAL					878

Comments:

A study of Table I shows that more Chinese entered the State than any other nationality. This is easily accounted for. This increase represents almost entirely an inflow of Chinese labourers on contract work, and they will be in the State for a maximum period of two years only.

The tables of Births and Deaths indicate an Infant Mortality rate of 102.5 and the following table gives this rate over the period 1948-1955:—

1948	...	...	...	258.5 per 1,000
1949	...	...	...	128.3 per 1,000
1950	...	...	...	136.9 per 1,000
1951	...	...	...	80.9 per 1,000
1952	...	...	...	103.9 per 1,000
1953	...	...	...	113.3 per 1,000
1954	...	...	...	99.6 per 1,000
1955	...	...	...	102.5 per 1,000

The United Kingdom rate for 1953 was 28 per 1,000.

For those who like comparisons the following tables may be of interest:—

CRUDE BIRTH RATES (APPROXIMATE ONLY)

			1953	1954	1955
Total Birth	...	...	2,903	3,332	3,600
Male	...	...	1,496	1,734	1,873
Female	...	...	1,407	1,598	1,727
Birth Rate Per Mille	...		52.3	57.3	52.5

CRUDE DEATH RATES (APPROXIMATE ONLY)

			1953	1954	1955
Total Deaths	...	...	808	766	878
Male	...	...	447	415	459
Female	...	...	361	351	419
Death Rate Per Mille	...		14.6	13.1	13.9

Note: The Crude Birth and Death rates are based on an approximate mid-year population of 62,836. However the reader should bear in mind the fact that there has been one census only in (1947), since the Second World War. Furthermore records for the period immediately following this census are scanty, and the population increase has been based mainly on Immigration figures, and those Births and Deaths which have been reported. It is not possible to state the margin of error, which almost certainly exists.

CHAPTER II.

OCCUPATION, WAGES AND LABOUR ORGANISATION

DURING the year there was little change in the overall picture of occupation in the State. At one end of the scale is the cultivation of small holdings by the rural indigenous population engaged in self-sufficient pursuits such as agriculture, fishing or the harvesting of jungle produce. At the other is the oilfield of Seria, where employment and in many cases preliminary training, is available in many of the skilled, unskilled and artisan trades incidental to an oil company.

With the extensive development programme of the State, the construction of roads and buildings, both public and private buildings continued within the localities of Brunei Town, Seria and Kuala Belait. Large numbers of skilled and unskilled labour were absorbed and to meet this increased building activity the number of small sawmills, woodworking and furniture shops increased by 40% in number and productivity.

The high price prevailing for rubber during the year induced considerable interest in small holder production. The four larger estates, due to labour shortage, were not able to increase their output as much as the high price for the commodity justified. Market gardening in the western area of the State continued to expand in order to meet the increasing oilfield area's demand for fresh vegetables.

Unemployment is non-existent as the demand for labour in both the skilled and the unskilled grades for outstrips supply. There is, therefore, no unemployment problem. The problem is rather the converse and consists in meeting excess demand for labour caused by the activities of the British Malayan Petroleum Company and their contractors, the Public Works Department and their contractors in carrying out the State Development Plan, the four rubber estates and some 18 small sawmills and woodworking industries working at full pressure. Outside these

activities the population is mainly engaged in peasant agriculture. Excess demand for unskilled labour must therefore be met by recruitment from either Sarawak or North Borneo, and in the case of skilled and artisan workers, by importation from Hongkong, Malaya and India.

A careful check is kept on the entry of such labour into the State. Such immigrant labour may only be engaged by reference to the Commissioner of Labour. All permits are for limited periods and are granted only to enable the completion of a specified task and where practicable, the training of a local worker in the same project.

With a slightly increased output of crude oil in 1954, the British Malayan Petroleum Company, Limited, had at Seria in its service some 1,308 (1,277 in 1954) European and a reduced Asian labour strength composed as follows:—

<i>Nationality</i>	<i>Unskilled</i>	<i>Skilled</i>	<i>Total</i>
Chinese	438	1,028	1,466
Malays	665	994	1,659
Indians	88	589	677
Ibans	345	128	473
Javanese	12	29	41
Others	1	3	4
Total	1,549	2,771	4,320

Wage Policy of the Oil Company:

The basic rates of pay of the Company's workers ranged from the minimum of \$3.56 per day for unskilled to \$9.30 per diem for the highest skilled artisans. Out of 4,320 (5,000 the previous year) workers employed by the Company some 290 only are on minimum rates, a figure comparing favourably with the 600 of the previous year.

Some additional 2,360 workers are employed by contractors operating on behalf of the Company within the oilfield area. The Company endeavours to safeguard the interests of such labour by inserting in the contract a clause binding the Contractor to observe all Brunei legislation effecting the conditions of employ-

ment in the State. Constant scrutiny and inspection is undertaken both by the Company and the Commissioner of Labour to ensure that such legislation is observed.

Additional features of the Company's wage policy include a temporary cost of living allowance at the rate of 25% of basic pay for married and 15% for single workers, schemes of allowances for workmen working in areas where living accommodation, amenities, etc. are temporarily below the standard provided elsewhere. Other allowances additional to normal pay are given for such work as diving, work of an exceptionally dirty nature, standing by, etc.

Hours of work are $43\frac{1}{2}$ per week, the working week consisting of $5\frac{1}{2}$ days. Shift workers do, however, work 6 shifts of 8 hours per week; but these men are paid a bonus for the afternoon and night shift.

Fifty percent extra pay is paid for all overtime worked. Employees receive annually two week's leave with pay, and, when absent from work through sickness, they receive full pay and cost of living allowance for the first two, and half pay plus half cost of living allowance for the next 10 weeks.

On retirement the Company pay an ex gratia payment in accordance with its own regulations on the basis of service and last rate of pay.

Of the welfare and amenities provided by the Company for its staff and workers the following are of interest:—

Health and Medical Services:

From its inception the Company has provided its own medical and health services. These have been open not only to employees, but also to their dependants. The Company operates a well equipped hospital at Kuala Belait with modern X-ray installations and full equipment for medical and surgical treatment and laboratory examinations. In addition to the hospital there are dispensaries and First Aid points throughout the oil-field to deal locally with staff and labour. These are coupled with an emergency medical and ambulance service which covers

the oilfield areas and conveys patients rapidly to the Kuala Belait hospital. For maternal and child Welfare the Company runs a pre-and-post-natal clinic.

A Joint Company and Government campaign against malaria is maintained. All new arrivals are checked for malaria infection and active measures are taken to eliminate the mosquitoes by draining and spraying potential breeding grounds.

Clubs:

There are four clubs for Labour Force employees in the Seria oilfield and each are run by a management committee elected from the club members. Although the policy is one of non-interference the Company takes considerable interest in their activities, assisting whatever necessary.

Recreation and sports amongst its employees have always been strongly encouraged by the Company and the clubs each have their facilities and equipment for football, cricket, hockey, badminton, volley ball and other games.

For the Regional Staff (Senior Asian Staff) there is a recreation club offering similar facilities.

The Kuala Belait Recreation Club, the only club in the area with no Company affiliations continues to expand. Members, including Company and Government employees and members of the commercial community, with widely differing interests, have found it a most valuable common meeting ground.

Cinema:

The oil company operates a new cinema of permanent open construction at Seria. Shows are held on daily and include British, American, Malay, Chinese and Indian films.

Transport:

The oil company provides free transport for its workmen to and from work.

Joint Consultation:

An effective channel of communication exists between the Company and their workers. Labour Force representatives who are elected annually meet the management once a month and

discuss working conditions, disputes, grievances and other matters affecting mutual relations and understanding. They are composed of ten Malays, ten Chinese, five Indian and five Iban members, roughly in proportion to their strengths in the Labour Force.

The Management Chairman is the Labour Force Officer. The Industrial Relations Officer, the Assistant Operations Superintendent, a Senior Engineering representative and other technical representatives attend from time to time to accord with the subject matter of the agenda, for example in any medical discussions the Chief Medical Officer would attend.

The scope of the discussions are very wide and, excepting individual cases, may consider any question concerning working conditions in general and any proposal by the workers or by the Company in regard to the promotion of industrial relations, improved production and efficiency.

Examples of subjects discussed during the year were housing, provision of transport, increased shift rates, medical and health, provision of safety boots, leave, retirement gratuities, grading of jobs, wages and allowances, provision of telephones at selected points, provision of water tanks and extension of ferry services.

In this way an effective channel of communication exists between the Company and its workers with a view to promoting a good management—employee relationship, so essential to an organisation of this nature.

Housing:

The housing programme continues to progress and more labour and regional staff are now housed to a standard that compares favourably with any other oilfield in the world.

Safety:

Since 1950 the Company has made a great effort to improve safety precautions and to reduce its accident rate. A safety department under an experienced officer specially trained in Safety work is actively engaged in the investigation of accidents and the inspection of plant and operations. A detailed analysis of accident statistics is made in order to determine the chief

causes and so indicate the type of campaign required to combat them e.g. whether by way of propaganda, mechanical safeguards, protective equipment, training, lectures or disciplinary action.

The safety department has the full support of management and by tact and enthusiasm has obtained the co-operation of Department Heads. This has enabled a considerable improvement in the overall accident frequency rate.

Education:

In addition to subsidising the attendance of children of its workers at non-Company schools in Seria and Kuala Belait, the oil company runs a Technical Trade School at Seria. This provides a three-year apprentice course and gives practical training in fitting, turning, motor and diesel mechanics, welding and blacksmithing; on the theoretical side there is instruction in the theory of mechanics, workshop practice, electricity, mathematics and machine drawing. During the first year the apprentices do a full time school course equally divided between the classroom and the school workshops. In the second and third years 70% of the time is spent in the Company's workshops and 30% in the classroom.

Entry to either Trade Schools has hitherto been open to pupils from any school in British Borneo but with the Brunei English School now reaching the stage in their development where they can provide candidates with secondary school qualifications the seeking of candidates from outside Brunei is being reduced.

To illustrate the growth of the Trade School the number of apprentices at the end of 1952 was 67. Comparable figures for 1953, 1954 and 1955 respectively 100, 130 and 141. The estimated figure for the end of 1956 is 200.

In 1953 the Company and the Government negotiated a Scheme whereby the Company would take 25 Brunei youths the following year and thereafter annually. This Scheme is progressing and these youths are making good progress.

The Company also grants a number of scholarships to the children of Labour and Regional Staff to enable them to pass the Senior Cambridge Examination. The recipient of these awards

is in no way bound to enter Company employment on completion of the scholarship.

At the end of the year His Highness the Sultan opened new Trade School buildings to house these apprentices. These consisted of some 4 to 5 blocks for the purpose of housing, feeding and instructing them on the lines of a modern English Public School.

General:

The following table shows the racial distributions of Labour employed by the main sources of occupation outside the oil company:—

<i>Race</i>	<i>Government (Public Works)</i>	<i>Rubber</i>	<i>Sawmills & Woodworking</i>	<i>Total</i>
Malays	1,835	317	121	2,273
Ibans	189	14	211	414
Chinese	86	32	146	264
Indians	9	5	—	14
Javanese	1	14	—	15
Others	16	8	6	30
	<hr/> 2,136 <hr/>	<hr/> 390 <hr/>	<hr/> 484 <hr/>	<hr/> 3,010 <hr/>

The Labour Commissioner for Brunei, is also the Labour Commissioner for Sarawak and is normally stationed in the oil-fields at Kuala Belait. All Assistant Residents are Deputy Commissioners of Labour and are responsible within their Districts for enforcing labour legislation and for the periodical inspection of places of employment.

An up-to-date Labour Ordinance embodying the principles of the International Labour Conventions exists. Enacted in 1954, it gives workers protection in such matters as hours of work, health conditions, the age of admission to employment, medical treatment, provision of written contracts of employment, notice pay and conditions of extra-territorial recruitment. A new up-to-date Workmen's Compensation Enactment has been prepared to replace the present one. Similarly a new Factory Ordinance has been drafted.

The cost of living was stable during 1955. Taking 1951 as 100 the average cost of living throughout the year was 93.61. This compares with 94 for the previous year. The limits of monthly oscillation were between the figures of 89.45 and 98.52. These figures are based on the cost of reasonable living requirements of a workman, his wife and three children.

With the exception of one minor strike Brunei State was free from Labour unrest during 1955. Minor cases of wage disagreements were settled without difficulty by either the Commissioner or Deputy Commissioners of Labour. Industrial disputes are rare. Demand for labour is in excess of supply and wages are generally high.

CHAPTER III.

PUBLIC FINANCE AND TAXATION

Revenue and Expenditure:

THE surplus of Revenue over Expenditure, other than Development Expenditure, for the year 1955 was \$73,735,464 compared with \$72,674,509 in 1954 and \$76,329,946 in 1953. Revenue and Expenditure figures for the years 1953, 1954 and 1955 are given below:—

				<i>Revenue</i>	<i>Expenditure</i>	<i>Surplus</i>
				\$	\$	\$
1953	...	...	...	98,976,643	22,646,697	76,329,946
1954	...	...	...	96,035,394	23,360,885	72,674,509
1955	...	...	...	102,669,423	28,933,959	73,735,464

Development Expenditure during 1955 amounted to \$14,068,315 bringing total expenditure to \$43,002,274 or almost \$720 per head of population.

Revenue:

Details of revenue collected during 1955 are given below. The 1953 and 1954 figures are also shown for comparison:—

	1953	1954	1955
	\$	\$	\$
Duties, Licenses & Taxes	65,293,794	58,845,608	54,225,597
Fees of Court etc. ...	205,907	373,275	432,545
Government Undertakings	516,785	694,881	4,036,163
Revenue from Government			
Property ...	25,688,983	26,811,723	31,896,451
Interest ...	6,640,452	8,747,719	11,176,716
Miscellaneous ...	501,313	418,838	552,892
Land Sales ...	129,409	143,350	349,059
	<u>\$98,976,643</u>	<u>\$96,035,394</u>	<u>\$102,669,423</u>

The main Heads of Expenditure are shown hereunder:—

PART I

1. Pensions, Retiring Allowances & Gratuities ...	174,870.87
2. H.H. the Sultan	300,933.23
3. Ministers	63,987.83
4. British Resident	103,321.49
5. Assistant Resident—Brunei	19,742.70
6. Assistant Resident—Belait	70,813.36
7. Agriculture	566,679.18
8. Audit	36,140.28
9. Civil Aviation	52,331.29
10. Customs and Marine	995,851.53
11. Education	1,179,514.91
12. Electrical	729,360.87
13. Forests	106,450.74
14. Information Service	110,296.44
15. Judicial	37,767.09
16. Labour	30,316.62
17. Land & District Offices	674,045.92
18. Legal	52,574.36
19. Medical & Health	1,669,329.46
20. Miscellaneous	5,035,264.20
21. Municipal	583,333.63
22. National Registration	4,112.69
23. Police	1,038,761.01
24. Postal Services	253,260.80
25. Prisons	39,524.60
26. Public Works Department	637,553.49
27. Public Works Annually Recurrent	1,536,238.44
28. Public Works—Non-Recurrent	7,596,726.16
29. Religious Affairs	97,915.02
30. State Custom, Religious & Welfare	37,541.00
31. State Stores	84,624.85
32. Supplies	3,523,801.57
33. Survey	504,922.43
34. Telecommunications	865,900.64
35. Treasury	120,150.79
	<hr/>
	\$28,933,959.49
	<hr/>

PART II—DEVELOPMENT PLAN EXPENDITURE

50.	Rubber Development	33,108.22
51.	Wet Padi Irrigation	49,931.29
52.	Mechanical Cultivation of Padi	264,384.66
53.	Agricultural Research	—
54.	Electricity—Brunei	815,889.99
55.	Electricity—Belait	109,610.39
56.	Electricity—Tutong	27,966.97
57.	Water Supplies	185,684.34
58.	Automatic Telephone Exchanges	—
59.	V.H.F. Radio Telephones	—
60.	Roads Programme	5,546,365.38
61.	Bridle Paths	77,495.66
62.	Brunei Airport	748,339.72
63.	Wharf, Kuala Belait	169,646.11
64.	Brunei Port	27,420.19
65.	River Clearing	—
66.	Miscellaneous	61,843.02
67.	Shops—Brunei	31,956.78
70.	Brunei Hospital	12,836.57
71.	Physiotherapy Department	18,397.52
72.	Hospital—Belait	32,475.78
73.	Rural Health Centres	2,080.00
74.	Rural Dispensaries	—
75.	T.B. Sanatorium	—
80.	Trades Training	328,766.56
81.	Teachers from Malaya	48,816.20
82.	Building grants	115,000.00
83.	Secondary school building programme	766,805.78
84.	Brunei Secondary (Girls)	148,776.06
85.	Seria Secondary (mixed)	33,134.46
86.	Higher Primary Schools	140,514.44
87.	Seria Malay School	157,634.00
91.	Primary Schools	705,537.71
92.	School Feeding Scheme	496,733.46
93.	Broadcasting	282.25
94.	Housing	120,797.65

95.	Resettlement schemes	42,040.50
96.	Sports and Clubs	11,258.50
97.	Pensions—Administration	44,713.08
98.	Pensions Payments	521,132.00
100.	Administration and equipment	39,806.77
101.	Public Works Compounds	655,581.72
102.	Heavy Equipment	56,908.82
103.	Workshops & Mobile Maintenance	238,722.41
104.	Quarters and Rest House	623,332.43
105.	New Scheme	—
		<hr/>
		\$14,068,315.39

Financial Statement:

The Statement of Assets and Liabilities as at 31st December, 1954 and 1955, are set out hereunder:—

ASSETS

<i>Previous Year</i>				<i>1955</i>
<i>1954</i>				
\$				\$
11,784,532	Cash in Treasury & Bank			4,634,905
6,846	Current accounts			12,890
2,726,016	Advances & Loans			554,503
73,503	Suspense			35,489
	Investments			
150,034,975	General Reserve			193,188,775
134,604,274	Surplus Balances			160,490,437
<hr/>				<hr/>
299,230,146				358,916,999

LIABILITIES

\$				\$
920,834	Deposits			718,753
90,967	Current accounts			312,753
150,034,975	General Reserve Fund			193,188,775
56,469,429	General Revenue Balances			87,051,093
91,713,941	Development Fund			77,645,625
<hr/>				<hr/>
299,230,146				358,916,999

During the year 1955 a further sum of \$43,153,799 was transferred to General Reserve Fund from General Reserve Balances.

Public Debt:

There is no public debt.

Customs Tariff:

The Customs Tariff is divided into two parts, namely—Import Duties levied on Intoxicating Liquors, tobacco, sugar, petroleum products, textiles and a variety of other products and Export Duties levied on rubber, copra, sago, livestock and sundry other products. Total import duty in 1955 amounted to \$3,813,342 and export duty totalled only \$58,531.

There was no change in the tariff in 1955.

Excise, Stamp Duties and Other Taxes:

Excise duty is levied on locally distilled samsu, which is the only alcoholic beverage manufactured for sale in Brunei.

Stamp Duties are levied on all documents required to be stamped under the provisions of the Stamp Enactment, and include a stamp duty on cheques, bills of exchange etc., and affidavits and contracts.

Estate Duty is levied under the Stamp Enactment upon all estates the value of which exceeds \$1,000 and the rates are as follows:—

Where the principal value of the estate;

exceeds \$	1,000 and does not exceed \$	5,000—	1%
exceeds	5,000 and does not exceed	10,000—	2%
exceeds	10,000 and does not exceed	25,000—	3%
exceeds	25,000 and does not exceed	50,000—	4%
exceeds	50,000 and does not exceed	100,000—	5%
exceeds	100,000 and does not exceed	150,000—	6%
exceeds	150,000 and does not exceed	200,000—	7%
exceeds	200,000 and does not exceed	300,000—	8%
exceeds	300,000 and does not exceed	400,000—	9%

exceeds	400,000 and does not exceed	500,000—10%
exceeds	500,000 and does not exceed	750,000—11%
exceeds	750,000 and does not exceed	1,000,000—12%
exceeds	1,000,000 and does not exceed	1,250,000—13%
exceeds	1,250,000 and does not exceed	1,500,000—14%
exceeds	1,500,000 and does not exceed	2,000,000—15%
exceeds	2,000,000 and does not exceed	3,000,000—16%
exceeds	3,000,000 and does not exceed	5,000,000—17%
exceeds	5,000,000 and does not exceed	7,000,000—18%
exceeds	7,500,000 and does not exceed	10,000,000—19%
exceeds	10,000,000 	—20%

Income Tax:

Income tax is charged, levied and collected under provisions of the Income Tax Enactment 1949, but at present only in respect of the incomes of registered limited Companies. On every dollar of the chargeable incomes of such Companies Income Tax is levied at the rate of 30%. There are reliefs in respect of tax paid in some other Commonwealth countries.

CHAPTER IV.

CURRENCY AND BANKING

Currency:

THE State is a party to the Malayan British Borneo Currency Agreement and only currency issued by the Board of Commissioners of Currency, Malaya and British Borneo is legal tender in Brunei; this, of course, includes the currency of the former Board of Commissioners of Currency, Malaya. The Dollar is valued at 2/4d (Sterling).

On 31st December, 1955, the amount of Malaya British Borneo Currency in circulation was estimated at \$39,490,000.

Banking:

Banking facilities in Brunei are provided by the Hongkong and Shanghai Banking Corporation which has branches at Brunei Town and Kuala Belait. The Hongkong and Shanghai Banking Corporation also operates a Savings Bank and at the 31st December, 1955, there were 893 accounts with deposits totalling \$1,843,287 compared with 294 accounts with deposits totalling \$486,481 at 31st December, 1954.

Post Office Savings Bank:

The number of depositors in the Post Office Savings Bank at the end of 1955 was 1,872 compared with 1,665 at the end of 1954. The growth of the Savings Bank is illustrated by the figures shown in the following table:—

Year		Number of Depositors	Amount of Deposits
31st December 1950	... ..	759	\$195,455
31st December 1951	... ..	928	265,605
31st December 1952	... ..	1,162	374,122
31st December 1953	... ..	1,399	521,378
31st December 1954	... ..	1,665	608,589
31st December 1955	... ..	1,872	670,633

CHAPTER V.

COMMERCE

TRADING and Commerce in Brunei is conducted by an increasing number of agency houses and Chinese merchants. The most important of the agency houses are the leading European firms, and they are responsible mainly for the import of goods direct from Great Britain, Australia and other sources. The number of Chinese merchants holding important agencies however, is on the increase, although the majority prefer to deal in the wholesale and retail distribution of goods purchased from merchants in Singapore, with whom they have had long established connections.

The Chinese merchants are responsible for the purchase of rubber and other jungle produce from the small holder and they provide the up-river population with sundry goods in exchange.

The whole of the import and export trade is carried on in the two ports of the State, i.e. Brunei Town and Kuala Belait, and it is at these two towns that the principal firms have established their business houses.

External Trade:

The value of the external trade of the State for the year 1955 was \$396,802,916 compared with \$373,357,401 in 1954, an increase of \$23,445,515.

The trade figures are made up as follows:—

	1955	1954
Total value of Exports ...	\$303,418,823	\$273,476,507
Total value of Imports ...	93,384,093	99,880,894
	<hr/>	<hr/>
Favourable trade balance ...	\$210,034,730	\$173,595,613
	<hr/>	<hr/>

Exports:

The f.o.b. value of exports for 1955 was approximately \$303,418,823, made up as follows:—

	1955	1954
Crude Oil	\$286,920,405	\$262,206,468
Rubber	3,569,958	1,180,896
Firewood mangrove	104,340	172,678
Jelutong Rubber	360,664	311,760
Natural gas	654,364	588,458
Sundries (including re-exports)	11,809,092	9,016,247
	<u>\$303,418,823</u>	<u>\$273,476,507</u>

Imports:

The declared value of imports for 1955 was approximately \$93,384,093 made up as follows:—

	1955	1954
Food	\$17,993,823	\$15,818,496
Beverages & Tobacco	3,830,632	4,222,615
Petroleum & Petroleum products	2,975,220	6,293,145
Textiles & wearing apparel ...	2,896,732	2,906,995
Chemicals & Drugs	2,481,578	2,005,910
Machinery & transport equipment	21,753,059	39,882,383
Building materials	14,899,034	4,639,606
Exposed cinematographic films ...	14,843,650	10,456,761
Manufactured articles and sundries	11,710,365	13,604,983
	<u>\$93,384,093</u>	<u>\$99,880,894</u>

Cargo Tonnage:

The total tonnage of cargo discharged and loaded for the year 1955 was as follows:—

	Discharged (Tons)	Loaded (Tons)
Brunei Town	40,076	16,947
Kuala Belait	125,177	44,627
Total	<u>165,253 tons</u>	<u>61,574 tons</u>

New Customs offices and godowns were constructed at Kuala Belait during 1955, together with a wharf with berthing facilities of 300 ft. At Brunei Town work commenced on the construction of Customs offices and godowns; a 400 ft. wharf is already in use. The buildings and wharves at both places have been, and are being constructed to provide adequate cargo handling facilities for the State. The Straits Steamship Company have three vessels operating on a full time run from Malaya and Borneo ports to Brunei.

Customs Revenue:

The total Customs revenue for 1955 amounted to \$4,004,305.

		1955	1954
Export Duties	... ..	\$ 178,179.75	\$ 58,532.00
Import Duties	... ..	3,826,125.61	4,433,943.00
		<hr/>	<hr/>
		\$4,004,305.36	\$4,492,475.00
		<hr/>	<hr/>

The increase in revenue collected from export duties was occasioned by the increase in the value and amount of plantation rubber exported during the year.

Tariffs:

The following alterations were made to the Customs tariff during 1955:—

Export duties were imposed on pepper and illipenuts (*Engkabang*)

Legislation:

The following were the principal changes during 1955:—

The Customs Enactment, 1954, came into force on 1st January, 1955, and the following rules and regulations during that year:—

27-10-55	Notification 200/1955	Customs (Prohibition and Restriction on Imports & Exports) Order, 1955.
27-10-55	Notification 202/1955	Customs (Compoundable Offences) Order, 1955.
27-10-55	Notification 203/1955	Customs (Import & Export) Duties Order, 1955.
2-12-55	Notification 243/1955	Customs (Establishment of Customs Warehouses and Warehouse Rent) Order, 1955
28-12-55	Notification 277/1955	Customs Regulations, 1955.

Excise:

The only alcoholic beverage distilled in the State is *samsu*, the product of three distilleries. Excise duty is chargeable at \$5 per gallon and duty collected in 1955 amounted to \$32,260 as compared with \$36,523 in 1954.

Trade Correspondence:

The Controller of Customs & Excise is designated as Imperial Trade Correspondent for the State of Brunei. Numerous enquiries were received during the year from various business firms in other parts of the world and appropriate action was taken in respect of each.

CHAPTER VI.

(a) LAND UTILIZATION AND TENURE

Agricultural Land:

ANY person born in Brunei may acquire agricultural land in perpetuity. Others may acquire land with the approval of the State Council.

The Land Code contains an utilization clause and land must be brought under cultivation within three years of alienation, in practice it is most difficult to ensure that land is in fact brought under cultivation within the prescribed period and in a great many cases land is acquired by speculators who only commence work on the land if and when they receive the six months notice to cultivate which the Land Code requires should be given to those who do not at once comply with the conditions covering alienation of land.

During the last three years land prices have appreciated considerably, particularly so in the vicinity of the larger towns. There are cases where land under poor quality seedling rubber has changed hands at \$15,000.00 per acre or more. The appreciation in the price of land has increased the demand for a secure title and applications for land have increased correspondingly, so much so that the Land Office has been unable to cope and the time lag between the submission of an application and the issue of a title has shown a tendency to lengthen. To cope with this situation increases in staff were authorised, the additional staff are undergoing training and the Land Office should be shortly capable of handling a greater volume of work. The situation is nevertheless very far from satisfactory and it will probably be at least two years before applications for land will be dealt with as expeditiously as is desired. Plans to reorganize the Land Office and Survey Department are being considered and some reorganization has in fact already been carried out.

The great difficulty in recruiting officers with the necessary qualifications is however an almost insuperable obstacle to rapid improvement in the situation.

There is need for revision of the Land Code and it is hoped that a Bill will be introduced into the State Council in 1956, legislation is also required in order to permit land to be classified, but at the moment there is no recognition in law of customary tenure although in fact, very large areas are utilized in this way. A Land Classification Enactment would permit of greater security of tenure being granted in those areas where the traditional methods of land utilization are based on extensive as distinct from intensive cultivation and should also do much to prevent inflation in land values and speculative dealings in land in areas where development is considered likely.

The improvement in communications is creating a greater demand for land in outlying areas but development has not been as rapid as would have been expected since many of the people living in rural areas have preferred to seek employment for wages rather than to devote their efforts to primary production.

Land and Water Conservation and Utilization:

Road and River Reserves have been declared for all roads and navigable waterways. Grants issued subsequent to the Notification have made allowance for these but little progress has been made in carrying out mutation surveys in the case of titles issued prior to 1951. The work involved is enormous and the compensation payable amounts to a considerable sum.

During 1955 increase in the demand for labour for Public Works of various kinds has imposed considerable strain on the resources of agricultural labour. In the Tutong Road area practically every unskilled labourer employed on Public Works has been taken away from agricultural pursuits. The result has been that a certain amount of agricultural land was uncultivated. In addition to this a much larger area was only partially utilised. It is unlikely that the situation will alter during the next couple of years and one must expect a gradual diminution in the production from land in this area.

During the year it became apparent that the rate which land was being alienated demanded far more attention to planning than

had been the case in the past, particularly if it was intended to raise the standard of living of the agricultural community.

In October last His Highness the Sultan proposed that substantial funds be made available to assist Rural Development and suggested that particular attention should be paid to the possibility of raising the standards of living and increasing production by the introduction of a system of agricultural credit which over a comparatively long period would assist in increasing capital resources to farmers or agricultural workers.

An application was made to the Government of the Commonwealth of Australia with a request that they should, if possible, assist us in carrying out soil surveys in the State. The Australian Government promised to send an expert from the Division of Soils of the Commonwealth Scientific and Industrial Research Organization who would carry out preliminary surveys in order to advise on the methods we should follow. Dr. Stephens had not arrived at the end of the year, but was expected very early in 1956. At the same time Sir Bruce White, Wolf Barry and Partners, Consultant Engineers, with wide experience in Malaya, were carrying out surveys of the Mulaut, Kilanas and Sengkurong areas, with the purpose of advising us whether these areas could be used for drainage, irrigation and possibly for mechanical farming. Their preliminary report indicated that mechanical cultivation and proper drainage and irrigation methods could be used.

As the land had previously been alienated to the community, it became necessary to consult the people living in the area with the object of obtaining their agreement to revision of land boundaries and a surrender of old titles in consideration for the issue of new ones. The State Surveyor was appointed "Settlement Officer" for this purpose and spent a considerable amount of time on settlement work in the areas, despite very considerable opposition in the area. He had, by the end of the year managed to obtain a great measure of agreement to the settlement and revision of land boundaries being carried out.

Land Ownership:

During the year efforts were made to prevent further inflation in land values, yet our efforts were only partially successful.

The Survey Department increased the number of surveys very considerably over the previous year and to a great extent the back log in issuing of titles has been overcome. This has been very greatly appreciated by those people who had almost despaired of ever receiving a title to their land. It is necessary to emphasise, however, that the continuing difficulty has been in recruiting staff for providing as rapid an improvement as had originally been planned. At the end of 1955 the Survey Department was still sadly understrength. Also there were a considerable number of persons under training.

(b) AGRICULTURE

Weather:

Apart from the month of January the weather conditions were normal throughout the State till the end of May. From August to December heavy showers occurred resulting in flooding in many of the low lying areas and also land slides in certain areas in Brunei district. This year's records and comparisons with last year's figures are shown in Appendix "D".

CROP REPORTS

Rubber:

The efforts of Departmental Officers and the Rubber Inspectors to induce small-holders to prepare smoked sheet in lieu of unsmoked sheet met with very fair response. This was chiefly due to most of the small-holders, who were contented to sell their unsmoked sheets at lower price than what they should be entitled to. By selling unsmoked sheet extra care and labour were saved.

It can, however, be stated that the quality of small-holders' rubber has gradually improved generally during the year. As a result the interest to build smoke cabinets specially designed for small-holders are slowly diminishing throughout the State. *Prices*—In January the price was \$100 per picul, and from February the price declined at \$80 to \$90 per picul till June. In July an upward trend started, when prices stood at \$100 to \$125 per picul.

Diseases. Mouldy Rot (*Cerastomella Fimbriata*) was the only at all prevalent or of a serious nature in the State. There

were outbreaks in the riverine districts of Temburong and Tutong, particularly severe during the wetter months, but elsewhere outbreaks were of a comparatively minor nature and soon yielded to treatment.

The incidence of termites (*Coptotermes curvignathus*) remained approximately the same as in previous years. The Agricultural Department took over the 26 acre Rubber Nursery at Berakas Government Rubber Plantation towards the end of the year. The necessary budding of the seedlings were then immediately started. Out of 490,363 seedlings in the nursery 37,046 have already been budded and out of which 700 were sold to small-holders at 25 cents per stump.

There was a marked increase in export of rubber sheet during the year. A total of 1,442 tons being exported this year as compared with 882 tons last year.

Padi Season 1954/55:

The acreage of wet padi increase by approximately 132 acres, and the crop was also higher by 499,915 *gantangs*.

As compared with that of the 1953-54 season. Negligible pest damage and favourable condition appear to have been largely responsible for this increase.

The dry padi crop likewise compared unfavourably with that of the previous season, the planted area decreasing by some 1,111 acres and the crop being approximately 479,783 *gantangs* less. Most of the areas were planted late and became overrun with weeds.

Season 1955/56:

It is estimated that the total acreage of wet padi planted in the State is less than that of the previous season. This was chiefly due to the fact that most of the padi planters were employed on various jobs, for example, by the Public Works Department, contractors and British Malayan Petroleum Company as a result planting of padi was carried out only as a part time work.

Drainage and Irrigation Ditches:

Regular inspections of drainage and irrigation works have now been included in the routine duties of the Subordinate Staff and it is found that small repairs can often be attended to by the cultivators themselves before the damage reaches the stage when it would become necessary to employ skilled workers.

The following figures showed new construction and clearing of drains during the period under review:—

<i>District</i>		<i>New Con- struction in chain</i>	<i>Cost</i>	<i>Clearing of old drain in chain</i>	<i>Cost</i>
Brunei	...	774½	\$17,359.00	1,218	\$13,436.50
Kuala Belait	...	105	1,965.00	403	4,369.00
Temburong	...	139	2,680.00	35	525.00
Total	...	1,018½	\$22,004.00	1,656	\$18,330.50

Swamp Padi Surveys:

The Consulting Engineers Sir Bruce White Wolfe Barry and Partners completed the Preliminary survey of Lumapas and Mulaut during the year and presented a report and project plan for Lumapas. From this it seems likely that up to 2,100 acres could be developed as irrigated padi land in this area. The report and project plans for Mulaut were not ready by the end of the year, although all survey work had been completed, due to the need to investigate an alternative source of supply of irrigation water. Originally it had been intended to impound water in the upper Damuan valley but as there appeared to be considerable pollution from oil mining operations in that area, it was decided to base plans for development of the Mulaut area on water from the Limbang river in Sarawak.

Sago:

The area under this crop remained the same as in previous year. The total output of raw material during the year was 2,517 piculs and out of which 247 piculs were exported to neighbouring territory. The remainder being consumed locally chiefly by the peasants. Manufacture of raw sago continued to be a profitable minor industry. Hand labour is used throughout in the manu-

facture. The bye-product usually sold to pig rearers for feeding purposes.

Coconuts:

The estimated acreage under this crop at the end of the year was 1,999 acres as compared with 1,648 acres in 1954. The major portion is grown in the districts of Brunei, Tutong and Temburong. The growers chiefly Malay small-holders except Temburong district where a Company has planted 351 acres with the aid of Government loan to start this industry.

All the nuts produced are used for local consumption and no attempt to manufacture copra is made owing to scarcity of nuts.

Squirrels did certain damage to young and matured nuts.

Fruits:

The total area under fruits in the State is estimated to be 1,561 acres, of which, 1,048 acres were in mixed cultivation.

The mid-season crop was a good one in so far as the majority of the local types of fruit were concerned. *Membangan, langsung, durian, rambutan, belunu* and *Kambayau*, in particular, were available in considerable quantities.

There were 15 village fruit nurseries in Brunei district during the period under review which were made up as follows:—

Kilanas	1
Sengkurong	4
Jalan Muara	7
Tutong	2
Kuala Belait	1
	<hr/>
	15
	<hr/>

MARKET GARDENS

The area under vegetable gardening remained the same as in previous year's. Most of the gardens were being maintained and cultivated. The Chinese still continued to be the main producers, especially near the towns. vegetable cultivation amongst the Malay small-holders continued to make slow but steady headway

and many of the smaller and more remote villages are now self-supporting.

AGRICULTURAL AND PADI TEST STATIONS

Agricultural Station, Kilanas:

The growth of the permanent crops continued to be satisfactory. Fair crops of *rambutans*, *pulasan*, mangosteens, bananas and citrus were harvested.

Most of the area was kept under *Calopogonium* covers. The most successful fruit crops were grown with dressings of cattle droppings and artificials before flowering.

Good progress was maintained during the year. Replacement of some of the permanent crops was completed, while annual crops were grown in rotation. An additional plot of 4,900 sq. ft. was brought into cultivation to allow extension of the nursery area for budding work. Considerable quantities of planting materials were distributed from the Station to other Agricultural Stations, School gardens and local cultivators. The distributed planting materials consisted of the following:—

Rambutan (budded)	485
Rambutan (seedlings)	1,129
Pamello (marcotts)	39
Orange (marcotts)	197
Lemon (marcotts)	11
Lime (marcotts)	15
Pulasan (budded)	7
Sapodilla (marcotts)	2
Jambu mawar (marcotts)	17
Coffee (seedlings)	117
Papaya (seedlings)	290
Durian Belanda (seedlings)	88
Orange (seedlings)	23
Manggis (seedlings)	43
Coconut (seedlings)	8,670

Cattle, Buffaloes and Goats:

Breeds of various animals which would be of economic importance to this country are kept so as to serve as a demonstration centre to the farmers. Saanan goats are now in an excellent condition and have become acclimatised to this country. These milch goats have very great possibilities for milk production in this country and can easily be maintained by farmers with a little extra care.

Local goats and buffaloes maintained their usual good record.

Poultry:

As a result of instructional work and example set by Agricultural Subordinates the demand for pure bred poultry has exceeded the supply. In November, 945 day old chicks were ordered from Australia for raising at this Station. These will be segregated and penned for breeding purposes. Surplus cockerels, for which there is a good demand, have already booked by small-holders. The work, however, was severely hampered during the later part of the year on account of the very poor laying and fertility of the pure-bred parent stock. The health of the stock was excellent, and few losses occurred in spite of severe outbreaks of disease in the neighbouring holdings.

Season 1954/55:

There were 15 varieties being planted in the usual multiplication plots during the seasons. Although the season was a good one the crops were slightly below average owing to minor pest damage coupled with unsuitable condition just before harvest was commenced.

Season 1955/56:

The 1955-56 programme included (a) Varietal trials (b) manurial experiments and (c) multiplications.

(a) One five-way Latin Square was laid down, comprising the following varieties:—

Engkatek, Langsat Puteh, Siam 29, Trengganu and Langsat Kuning.

(b) The five by five Latin square was laid down to test a mixture of lime, phosphate and sulphate of ammonia sug-

gested by the Director of Agriculture, Sarawak. The varieties used were *Engkatek*, a new short strawed type from Sarawak and *Langsat puteh* one of the most popular local types. The first application of the treatments was a month after transplanting and the second treatments broadcast just before flowering. Very marked advancement in growth and earlier ripening is apparent when compared with other adjoining untreated areas.

(c) All land not utilized for experiments has been planted with various strain types for multiplication purposes. Transplanting was completed during the month of November. Prolonged flooding necessitated replanting of certain areas. At the end of the year the crop was doing well and was free from much damage from rats and other pests.

Wet Padi Mechanical Cultivation Scheme, Mulaut:

Season 1955/56: The experiment on wet Padi mechanical cultivation was started by the Consulting Engineers but they were greatly handicapped by the delays in the supply of equipment. Progress was, as a result, rather disappointing but towards the end of the year it was possible to commence trials of cultivating equipment, using the cable bantam technique, with one track laying tractor that had arrived and a drag-line excavator intended for canal construction work.

In preparation for harvesting trials when the second tractor arrives 15 acres of padi (4 different varieties) was planted accurately by hand and will be harvested mechanically. Transplanting and further cultivation trials will be possible out of season when full equipment arrives and the water control over the experimental area has been secured.

Padi Test Plot, Lumapas:

Season 1954/55: The whole of the five acre plot has been planted with various pure strain types for multiplication purposes. At the close of the year rats had been the only pest resulting in any material damage. Control measures have been adopted, but uncultivated areas have minimized results. Growth over the majority of the area is quite average for the district.

Season 1955/56: Work are continued on similar lines to previous years and consisted of large multiplication plots of local and imported selected varieties which were grown to provide seed for distribution to local padi planters.

Heavy rains fell shortly after transplanting and flooding occurred in all areas in the district. Fortunately the flood waters subsided quickly and, only slight damage was occasioned to the transplanted seedlings.

Agricultural Station, Birau:

Very satisfactory progress was made by most crops, viz:—liberian coffee, pepper, citrus, *rambutan*, *pulasan*, bread fruit, *jambu ayer*, oranges, pomelo, jack-fruit, soursop, cocoa, bananas and illipe-nuts.

No further land from the reserve was brought under cultivation.

Food crops grown during the year, cuttings and seeds from which were distributed to small-holders were groundnuts, sweet potato, maize and yams. Citrus marcots, papaya seedlings, pineapple suckers, betel-leaf cuttings and calopogonium seeds were also distributed to other districts and stations.

Considerable attention was paid to drainage problems in the various plots during the year. On one occasion towards the end of the year flood waters inundated the low-lying portion of the Station and caused considerable damage to growing crops particularly the vegetable garden.

Horticultural Garden, Jalan Istana:

This garden served a useful purpose to the public in the way of supplying ornamental trees, shrubs and plants to Government Officers' residences and public gardens. All the materials issued or supplied were charged for. The area is now being fenced in. A proper potting shed is also in the course of construction.

The following planting materials were distributed or issued during the period under review:—

<i>Begonia splendens</i>	8 plants
<i>Bougainvillea</i> sp.	52 plants
<i>Galadium bicolor</i>	23 plants
<i>Canna</i> sp. & var	102 plants
<i>Chrysanthemum</i> sp.	10 plants
<i>Crossandra undulaefolia</i>	6 plants

Dahlia sp. var	3 plants
Dieffenbachia sp.	8 plants
Gaillardia sp.	4 plants
Galphimia glauca	18 plants
Gardenia florida	3 plants
Hydrangea	24 plants
Hibiscus rosa senensis	26 plants
Ipomea digitata	6 plants
Lantana camara var	18 plants
Nerium olander	4 plants
Nyamphaea Lotus & var	9 plants
Plumeria sp.	5 plants
Rose	14 plants
Salvia splendens	25 plants
Sansevieria frifsciata	6 plants
Spathoglottis plicata	2 plants
Thunbergia erecta & sp.	10 plants
Turnera trionaeiflora	4 plants
Typhonium trilobatum	2 plants
Casaurina sumatrana	66 plants
Dacrudium elatum	8 plants
Delonix regia	4 plants
Peltophorum ferrugineum	15 plants
Spathodea campanulata	4 plants
Total	489 plants

(c) ANIMAL HUSBANDRY

Animal Breeding Farm, Jerudong:

This station is steadily gaining progress as more and more developments are taking place. More of scrub-land was fenced off as pasture.

Experimental paddocks for testing the stock carrying capacity has been completed. These are divided into 13 half acre plots, each planted with different grasses and legumes both foreign and indigenous. The following are used for trial:—

- (1) Guinea Grass (*Panicum maximum*)
- (2) Molasses Grass (*Melinis minutiflora*)
- (3) Carpet Grass (*Axonopus affinis*)

- (4) Bahama Grass (*Cynodon dactylon*)
- (5) Kampau
- (6) Batong Batong
- (7) Galagah Tikus
- (8) Sesik Buayu halus
- (9) Sesik Buayu kasar.

The results of these tests will only be available in a few years. From these experiments we hope to obtain the grass most suited to the soil and climate and which would permit a large number of animals to be kept at a minimum of concentrates.

Sindhi Cattle: Two bulls and 6 cows were introduced into this farm in May, one bull is used to grade up local cattle at the farm and the other to maintain a pure herd. Two bull calves and 1 heifer calf were born in the farm, of which 2 are in excellent condition. The first Sindhi cross bred calves are expected next year. From observations made, the Sindhis are doing fairly well.

*Bali Cattle (*Bos Sondaicus*):* These domesticated Banteng are in an extremely fine condition and seem to thrive on very rough grazing. These hardy species seem to be ideal for beef production in this country from observations made at the Station.

Local Cattle: These are in a fair condition. Two breeding bulls have been loaned to Labu Estate and His Highness herd.

Swamp Buffaloes: The hardy local buffaloes continue to be in excellent condition. Three bulls are used for work in the farm.

Goats: These continue to be in excellent condition. The private herd to His Highness maintained in Jerudong are in a fair condition. A total of 2,933 pints of milk were produced in the farm with only one milking. The calves being allowed to suckle all the milk in the later part of the day.

General Animal Husbandry in the State:

Buffaloes: The annual stock census showed that there were 11,389 buffaloes (a decrease of 128) as compared with 11,517 heads last year. During the off-season, the stock graze on the padi stubble and are generally in better condition as a result.

This practice has its drawbacks, however, as it is highly probable that the animals take more from the land than they put back, thereby entering into direct competition with the padi crop for the supply of soil nutrients; also buffaloes being heavier animals do considerable damage to bunds and water courses.

Cattle: At the end of the year the cattle population was 1,433 and this figure showed a slight increase compared with the previous year. The health of the local animals in general was quite satisfactory. There was no death of animals which could have been caused by serious disease.

Goats: The total number was estimated at 771 an increase over last year's figure. Interest in rearing these animals still being maintained during the year by the local peasants. Most of the goats were kept in free range grazing and there was no report of outbreaks of any serious disease amongst the animals.

Pigs: Attempts to grade up the local breed of pig, by crossing with the Middle White Breed, has been a failure owing to suitable boars not being available. Pig rearing in the State are all in the hands of Chinese, *Dusuns*, *Muruts* and *Dyaks*.

Poultry: There was an increased interest in poultry keeping throughout the State during the year. Small flocks were started in one or two of the Malay Schools. The demand for pure and cross-bred cockerels for crossing with local hens was greater than the supply. On the whole these pure-bred have done sufficiently well under *kampong* conditions to induce more enlightened keepers to destroy their local cockerels and to use only improved stock.

Agricultural Credit Schemes & Subsidies:

Although quite a number of applications for loans were received for Agricultural purposes, but none was approved till the end of the year owing to some misunderstanding between the borrowers and the Government.

The policy of sale of barbed wire at 50% of cost to owners of buffaloes to fence their communal grazing grounds were still in operation. There were 1,300 rolls of barbed wire issued.

Agricultural Show:

An Agricultural Show organised on a State basis was held at the Sultan Mohamad Jamalul-Alam Malay School, Brunei, on 20th August, and was formally opened by the *Yang Maha Mulia Raja Istri* of Brunei. The Show was a success and attracted some 1,000 people during the one day. Entries in all classes were fairly satisfactory.

The usual special section of Silverware, Brassware and Arts and Crafts were exhibited, and prizes for these were awarded by the Commissioner-General, South East Asia.

A departmental stand on which various Agricultural produces were also exhibited. This has proved to be the chief attraction of the show.

Visitors:

There were 1,163 visitors to the Agricultural Stations during the year. Amongst the notable visitors as hereunder:—

His Highness the Sultan of Brunei

The Raja Istri

B.P. Behandar D. P. Pemancha

Mr. G. W. Nye, Colonial Agricultural Adviser

Mr. R. W. R. Miller, Director of Agriculture, Sarawak

Mr. J. L. Greig, Director of Agriculture, North Borneo

Mr. Song Thian Siang, Agricultural Officer, Miri.

Administration:

Mr. F. J. Harper, Deputy Director of Agriculture, Sarawak, officiated as State Agricultural Officer until the 5th August, 1955, when he was relieved by *Inche* Hamidoon bin Awang Damit for the remainder of the year. Mr. F. J. Harper still being retained in the State as Deputy Agricultural Adviser. His assistance and advice on the Wet Padi Mechanical Cultivation Scheme at Mulaut was being sought till the end of the year.

Three students were sent to the College of Agriculture, Malaya, to undergo the one year course. The Agricultural Assistant (*Inche* Hamid bin Ja'afar) left for Australia towards the end

of the year to take up the 3-year diploma course at the Gatton Agricultural College, Brisbane, Australia, under the Colombo Plan.

A seconded Assistant Veterinary Officer (Mr. A. K. Sundram) from Sarawak reported for duty on the 28th December, 1955, and he is now attached to the Agricultural Department.

The staff of the Agricultural Department at the end of the year consisted of:—

- 1 State Agricultural Officer
- 1 Assistant Veterinary Officer
- 2 Agricultural Assistants
- 11 Agricultural Field Officers
- 9 Agricultural Field Inspectors
- 2 Probationers
- 1 Special Grade Mechanic
- 4 Drivers
- 2 Clerk Grade B
- 1 Clerk Grade A
- 1 Peon

(d) FORESTRY

(Figures for 1954 are given in brackets after figures for 1955)

INTRODUCTION

Certain facts place the Brunei forest department in a unique position compared with others in the Commonwealth. These facts need to be emphasised because they are fundamental to an understanding of forestry in Brunei. They are—

- (i) Freedom from pressure on the land. Fifty thousand persons inhabit 2,226 sq. miles of the State; 75% is under high forest.
- (ii) Freedom from pressure on the forest. The present cut is far below the potential cut on a sustained yield.

- (iii) Indifference to revenue. The State's revenues from the oil industry are sufficient for current expenditure and for development. The policy is therefore not to squeeze every cent out of the forests at the present time, as most States are compelled to do in order to balance their budgets, but rather to conserve and develop the forests against the day when the oil wells start to run dry.

Total area of State	Forest Reserves	Stateland Forests	Secondary Forests	Agricultural and residential areas
Sq. Miles 2,226	938	740	456	92
%	42%	33%	21%	4%

Forest Reserves:

These are intended to be kept under high forest in perpetuity, and to form the permanent forest estate. The list of forest reserves is given in Appendix "E" and their position is shown on the map at the end of this report.

The development of the Government gravel quarry on the coast at Berakas, and of access roads thereto, resulted in the clearing of a good deal of forest in the Berakas forest reserve; it was therefore decided to excise the area affected, and to extend the reserve westwards along the coast. A preliminary notification describing the proposed new boundaries of the reserve was published in September.

State land forests:

These also belong to the Government but will tend to disappear as the land is alienated for other purposes or cleared for shifting cultivation.

Secondary forests:

These consist of secondary growth or bush fallow, varying in age from 1 to 40 or 50 years, on land that has been cleared of its virgin forest for shifting dry padi cultivation. The land is still owned by the Government, but the person who originally clears the virgin forest has the right to cultivate dry padi on the land subsequently, under native customary law.

2. MANAGEMENT OF FORESTS

A 10-year plan 1955-64 for the management of the forests of Brunei was approved by the State Council on the 28th February, and printed copies are available from the State Forest Officer. It includes a description of the forests, with areas covered by the various forest types, and a detailed statement of the Government's policy for both forest reserves and state land forests. It is considered that adequate areas of forest have been reserved for the time being, and the plan calls for management of the reserves on the basis of sustained yield by working circles.

The plan was circulated in draft, before submission to the State Council, to the Forest Adviser, to the High Commissioner for Brunei and also to the Forest Adviser to the Secretary of State for the Colonies, and their valuable suggestions incorporated in the final draft.

Maps:

A Delft scanning stereoscope, purchased early in the year, proved most useful in preparing 1:25,000 maps of forest reserves, particularly in the *ulu* Belait, *ulu* Tutong, and *ulu* Temburong areas. All forest reserves are now for the first time covered by maps on this scale, all compiled and drawn in the forest office.

3. SILVICULTURE

Silvicultural treatment after fellings continued in the Anduki forest reserve, where the work was brought up to date. Similar treatment will be extended to the Andulau forest reserve as soon as exploitation in the first compartment (No. 5) has been completed. The treatment consists in poisoning all unwanted trees with sodium arsenite.

4. COMMUNICATION

The proposal to clear the Belait river of snags, mentioned in last year's report, has now reached the stage of calling for tenders for the work.

5. PROTECTION OF FORESTS

Maintenance of boundaries:

Batu Apoi forest reserve. The boundary rentis from the Sungai Batu Apoi northwards to the boundary ridge was cleared.

Labu forest reserve. All rentises were cleared, except the Sarawak-Brunei boundary rentis which was done last year.

Belait peat swamps. The Sarawak-Brunei boundary rentis was cleared from the Pagalayan Canal to the sea.

Forest offences:

No important forest offences were detected during the year.

6. FOREST INDUSTRIES

The four main forest industries in the State are—

- (i) the timber industry;
- (ii) the firewood and charcoal industry;
- (iii) the *jelutong* industry;
- (iv) the minor forest products industry (rotans, leaf *ataps*, *damar*, etc.).

Timber industry:

The industry concentrates on supplying the internal market, which is dominated by the 700 cubic tons per month (average) requirement of the British Malayan Petroleum Company, mostly in the Seria-Kuala Belait oilfield area. Government contractors also buy large quantities of timber for the numerous buildings under construction by the Public Works Department. The industry is unable to meet the full requirements of the market, largely for want of an adequate and reliable labour supply, and in consequence about half of the timber used is imported (chiefly from Sarawak).

Timber prices in the oilfield, which controls the market, remained much the same as over the two preceding years:—

	\$ per cu. ton
Selangan batu (c.i.f.)	330
Kapor bukit (f.o.b.)	170
Kapor paya (f.o.b.) 18' and under	130
Kapor paya (f.o.b.) 20' and over	140
Keruing (f.o.b.) 18' and under	170
Keruing (c.i.f.) 18' and under	178
Semayor (c.i.f.) 18' and under	178
Meranti (f.o.b.) ex Marudi, Weston	110
Seringawan (f.o.b.) ex Badas	110
Sempilor (f.o.b.) ex Lawas	110

The British Malayan Petroleum Company kindly supplied the above figures; other species are very rarely purchased by them.

Sawmills:

No sawmill may be installed without a permit from the Forest Department; such permits are always linked with a licence for a suitable area of forest. There are 23 sawmills in the State, but many of these are one-bench mills, driven by a petrol engine (such as a Ford V8) or a light diesel engine, and move about periodically from one patch of State land to another. At least seven of these small mills are either moribund or struggling hard to keep going; in general, experience has shown that it is difficult for the small up-river mill to compete with the larger mills at Belait and Tutong unless either they are cutting a valuable timber (e.g. semayor or selangan batu) or they are very accessible to the market (e.g. Liew Kim's small mill in Anduki forest reserve). Needless to say it is the moribund mills that apply to Government for large financial loans, in the hope that a shot in the arm will keep them going a year or two longer.

Chinese hand-sawyers continued to demonstrate that they can compete successfully with sawmills, and a small but steady outturn of valuable timber cut by them comes out of the Kuala Abang road forests.

The two mills in Kuala Belait are being equipped with electric motors, and will go over to electricity as soon as Government can supply the power. The most recent of these two mills, belonging to the Shing Yip Co., is expected to be completed in April 1956, and will have a capacity of 15 tons sawn output per day; if their logging organization can provide enough logs, this mill should go a long way to meeting the demands of the Seria-Kuala Belait area. It is hoped that the clearing of the Belait river, to be undertaken by Government during 1956, will materially assist these two sawmills.

Timber:

	<i>Outturn in cu. ft.</i>	
	<i>1955</i>	<i>1954</i>
Forest reserves, round logs	147,102	(133,491)
Forest reserves, sawn timber	128,562	(115,134)
Other forests, round logs	424,110	(486,977)
Other forests, sawn timber	113,851	(123,221)

These figures are summarised from the statement in Appendix "G". There is no significant difference between the figures for 1954 and 1955. Where convenient, all logs are measured in the round before milling, but where this is impracticable as, for example, in some of the small mills upriver, the timber is measured for royalty after sawing. It is for this reason that our statistics are partly in terms of round timber and partly of sawn timber.

Poles:

	<i>Outturn in cu. ft.</i>	
	<i>1955</i>	<i>1954</i>
Mangrove poles	47,330	(29,202)
Junglewood poles, taken by B.M.P. Co.	9,478	(15,607)
Junglewood poles (Misc.)	4,417	(24,233)
	<hr/> 61,225	<hr/> (69,042)

Firewood:

(a) *Mangrove.* Production of mangrove firewood was 396,120 (408,678) cubic feet. Of this total 9,693 (11,518) shipping tons was exported to Hong Kong by the George Ah Foott Firewood

Co. Ltd., who state that the drop in production is due to labour difficulties. The Hong Kong price for firewood fluctuates considerably, and during 1955 the price received ranged from Str. \$21.85 down to Str. \$7.56 c.i.f. with an average of Str. \$13.54.

The use of *nyireh bunga* firewood for firing the Soon Lee brick kilns at Sengkurong continued during the year.

(b) *Other firewood.* Production of firewood other than mangrove totalled 62,371 (48,484) cubic feet. This was mostly produced in the Tutong district for firing the Soon Lee brick kilns at Sengkurong; it is more expensive than *nyireh bunga* firewood, but sufficient supplies of the latter cannot always be obtained owing to labour shortage in the mangrove forests.

Charcoal:

Seventeen kilns produced 38,844 (34,558) cubic feet. The market for charcoal is limited, and it is doubtful whether it can absorb much more than the present production, which goes mostly to coffee shops in the towns. The local manufacturers are unable to compete with the highly organised Malayan industry in the Hong Kong market, and there are no exports.

All the kilns are sited on Pulau Berbunut, and burn mangrove wood exclusively; *bakau* (*Rhizophora* sp.) is used for making the charcoal, but for firing the kilns other species can be used. As one *pikul* of charcoal is roughly equivalent to 9 cubic feet, the outturn for the year was about 4,300 *pikuls*.

Jelutong:

Production of *getah jelutong* totalled 3,690 (2,566) *pikuls*. The swamp forests of the Belait and Tutong districts, and the Labu forest reserve, are the principal areas in which this product is obtained; it provides part-time employment for many persons living in rural areas, and yields one-quarter to one-fifth of the total forest revenue each year.

Minor forest produce:

Appendix "H" gives details of returns from minor forest produce. Not appearing therein (because no royalty is charged) is an item of 814 *pikuls* of illipe nuts (fruit of *Shorea* spp.) exported, on which the Customs Department collected duty.

7. IMPORTS AND EXPORTS

There was no export of timber during the year. Export is prohibited because the timber trade is at present unable to meet the demand for timber within Brunei State, as the following paragraphs illustrate. Figures for exports of mangrove firewood and *jelutong* are given in previous paragraphs.

Imports:

(a) *Belian ataps (shingles)*. These are the traditional roofing material in Borneo, and are mostly obtained from Bintulu in Sarawak, but export from Sarawak to Brunei is only permitted by the Sarawak Government against indents issued by the P.W.D. Figures for imports in 1955 are not yet available.

(b) *Timber*. The Department of Trade and Customs, Sarawak, annual statistics for the year 1954 show the following sawn timber exported to Brunei:—

<i>Type</i>	<i>Quantity in tons of 50 cu. ft.</i>
Lumber, conifer	974
Lumber, ramin	100
Lumber, meranti	7,966
Lumber, belian	146
Lumber, hardwoods	2,572
Lumber, non-conifer not elsewhere specified	966
	<hr/> 12,724 <hr/>

Production of lumber within the State during the same period is estimated from Appendix "G" of the Brunei 1954 Annual Report at 11,360 tons in terms of sawn timber (assuming 50% recovery on conversion of round timber). In other words, in 1954 the timber trade in Brunei was producing less than half the total internal requirements, and it is thought that the 1955 figures when available will show a similar pattern. Some lumber is also imported from British North Borneo and from Singapore, but the quantities are small by comparison.

Sarawak forest department 1955 statistics show that the export of timber to Brunei from Sarawak Fifth Division ports (chiefly Lawas, to a lesser extent Limbang, Sundar, Trusan)

totalled 56 (144) tons of round timber and 2,371 (2,902) tons of sawn lumber during the year. This includes 79 tons of conifer timber (*sempilor*).

8. RESEARCH

1955 will go on record as one of the heaviest and most general flowering and fruiting years of the family *Dipterocarpaceae*; this was probably consequent on an unusually dry spell in February and March. Some valuable botanical material was collected by all ranks of the forest staff. The State Forest Officer visited the Forest Research Institute at Kepong during February for 10 days to study all the Brunei material available in the herbarium there; discussions with the Director of Forestry and the Forest Botanist led to a recommendation that Brunei should employ a qualified botanist for at least 5 years to produce a manual of the timber producing species on the lines of Symington's "Forester's Manual of Dipterocarps"; without such a manual scientific forestry and sound silviculture cannot make much progress. A check-list of all known Brunei dipterocarps has been drafted in typescript by the State Forest Officer as a basis for future work.

9. EDUCATION

As usual, Brunei sent one student to the Forest School for the one year vernacular course. Forest Guard Yahya was placed 28 out of 60 in the final examination, obtaining a pass certificate; he also received a good report from the Instructor.

10. FINANCIAL RESULTS

A summary of revenue and expenditure for the year is given below:—

Year	Revenue	Expenditure			Surplus
		Personal Emoluments	Other Charges	Total	
1955	120,492	72,096	32,635	104,731	15,710
1954	128,633	61,498	38,352	99,850	28,783

Details of revenue from different classes of forest produce are given below:—

<i>Kind of Produce</i>	<i>Revenue 1955</i>	<i>Revenue 1954</i>	<i>Increase or Decrease</i>
Timber and poles	65,639	82,564	16,925
Firewood and charcoal	13,263	15,504	2,241
Jelutong	38,818	30,349	11,011
Minor forest produce	2,542		
Other sources	179	111	68
Compensation and fines	—	105	105
	<hr/> 120,441	<hr/> 128,633	<hr/> 8,192

The drop in revenue was principally in the Belait district, where the Anduki forest reserve has almost been worked out. It is hoped that this trend will be reversed in 1956 by the two sawmills in Kuala Belait, both of which are enlarging their mills with more modern equipment. The clearing of the Belait river should make it easier for them to obtain adequate log supplies from their licenced areas in the very extensive forests of the upper Belait.

11. ADMINISTRATION AND GENERAL

Mr. B. E. Smythies, Assistant Conservator of Forests, held the post of State Forest Officer for the third year in succession, in addition to the post of Section Forest Officer, Limbang and Lawas sector, Sarawak. In order that he might be available to see the Forestry Development Plan through the State Council and the Press, an offer of the post of acting Conservator of Forests, Sarawak, was declined.

The staff of the department at the end of the year consisted of—

- 1 State Forest Officer
- 1 Chief Clerk
- 3 Assistant Clerks (Brunei, Tutong, Kuala Belait)
- 3 Forest Rangers (Brunei, Tutong, Kuala Belait)
- 6 Foresters
- 13 Forest Guards

- 7 Forest Labourers
- 1 Driver/Boatman
- 1 Draughtsman
- 1 Office *Peon*

The forest labourers, as in Malaya, are monthly-paid non-establishment personnel; vacancies of forest guard are normally filled from their ranks.

Conferences:

The State Forest Officer attended the annual conference of Sarawak forest officers in Kuching, 1-5th February.

He represented Brunei at the first forestry conference of the three Borneo territories, held in Sandakan 14-19th November; this included a two-day excursion to the Sepilok forest reserve to study silviculture and management.

Visitors:

Professor H. G. Champion, C.I.E., I.F.S. (retd.) Professor of Forestry at the University of Oxford, paid a brief visit in January and was shown the mangrove workings in Selirong forest reserve and the *kerangas* forest in Berakas forest reserve.

Legislation:

During the last quarter the Forest Rules were revised and reprinted. The explanatory note printed at the end of the new Rules is quoted below:—

“The Forest Rules, 1935, were based on the Forest Rules in force at the time in the Federation of Malaya. The latter have since been revised more than once, and the latest revision, in draft form, has been used for the revision of these Brunei rules, which are a simplified version of the Malayan ones. It was also considered desirable at the present time to have the rules reprinted so that they should be available to the public, and it was decided to revise them prior to reprinting.

The principal change in these rules is that royalty on all minor forest produce other than *jelutong* and other *getahs* and rattans is waived, and it is no longer necessary for the public to

obtain a licence to work bamboos, *damar*, leaves (*kajang*, *mengkuang* leaves, *mengkuang* mats, *nipah* leaves, *nipah atap*, *pandan* mats; *rumbia atap*), or *nipah* sugar.

The timber roll in Schedule I has been simplified by reducing the number of classes to two, as against four previously.

The old rules required sawmills to be licenced, but no form was prescribed. The Sarawak form is now prescribed, and a charge of \$20 per saw-bench introduced, as in Sarawak."

The reason for waiving royalty on minor forest produce was that the royalty obtained was negligible (see Appendix "H") but entailed a good deal of office work in district forest offices.

The new rules will come into force on 1st January, 1956.

(e) FISHERIES

The principal fishing areas of the State of Brunei are mostly coastal in the vicinity of river mouths and estuaries, or near coral beds and rocky patches, and while in previous years the Industry has depended almost wholly on these inshore grounds, the introduction and extensive use of outboard engines, originally purchased on interest free Government loans to the individual fisherman, has in 1955 enabled the Industry to extend its activities to the nearer offshore grounds with very gratifying results.

The mechanization of the fisherman with outboard engines commenced in the latter half of 1953, and although 1954 was the transitional period an immediate increase in the annual production was apparent. In 1955, with practically the whole of the Industry mechanized and only the very small one or two man *perahus* (canoes) still using hand paddles as a means of propulsion, the benefits derived from the use of engines became obvious as the following tables will show.

	1953	1954	1955
Total landings of Fish (all grades)	2,264.45	3,429.99	9,115.38
Prawns	589.38	921.45	1,008.80

These figures are given in the local weights of *pikuls* and *katies* that is 1 *pikul* (100 *katies*) is equal to 133½ lbs.

All fisheries in the State of Brunei are seasonal and methods of gears used vary accordingly. In 1955, however, a marked increase in the all year round use of the 'Bubu' is noted, and is

again attributable to the use of the powered craft and the resultant extended area of operation. Tables below show the various gears for which licences were issued during the year, and previous years' figures are also given for comparison.

<i>Gear</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>Explanation</i>
Pukat	24	17	21	Small drift net.
Rantau	14	3	19	Large drift net.
Kilong	107	31	27	Deep water fishing trap.
Paguyot	3	4	19	Drag net.
Kabat	24	25	30	Small fish trap.
Bubu	55	265	757	Similar to Lobster pot.
Tambak	10	20	24	Set net.
Lintau	58	118	102	Shoal water fish trap.
Slambau	3	18	16	Watched set net.
Penakat	40	32	—	Line fishing.
Rambat	7	8	10	Cast net.
Gurit	10	1	1	Long line.
Anchau	—	3	4	Similar to drag net.

These tables are for the whole State, and following is a break down of gears and boat licences issued during the year.

	<i>Gear Licences</i>			<i>Boat Licences</i>		
	<i>1953</i>	<i>1954</i>	<i>1955</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>
Brunei Town	93	83	76	92	59	68
Baru Baru	75	20	244	44	20	25
Kuala Belait	69	101	509	22	—	13
Tutong	19	160	678	19	21	31
Kuala Labu	69	80	92	76	71	96
Muara	71	63	120	32	39	39
Total	396	507	1719	285	210	272

River Fisheries:

River fisheries consist of a small number of fish wiers (*Kilongs*) and traps (*Bubus*) with the occasional use of a short line with baited hooks, and cast net (*Rambat*) fishing by night. Returns from river fisheries, however, are negligible, and such catches as are obtained consist mostly of small fish (*Bilis*) which have no marketable value and are cooked and eaten whole by the fisherman. These methods of river fishing are operated in the main for the personal consumption of the owner.

Prawn Fishing Industry (Tugu):

The “*Tugu*” industry, a characteristic type of prawn fishing using conical nets (*Tugu*) secured to wooden stakes and set in long rows across the flows of the tide, is centered around the southern part of Brunei Bay and has its headquarters on the two small Islands of Baru Baru and Berbunot. In this area, sets of *Tugu* nets, of up to nine or ten nets to a set (*Mata*), can be seen extending from the Southern shores practically right across the Bay and leaving only the navigable channels of Brunei, Temburong, Limbang and Pandaruan Rivers.

A percentage of the prawns landed in Baru Baru and Berbunot is, after being sun dried and powdered, exported as “prawn dust”. Considerable quantities of small prawns are also used as pig food to the farm on the latter named Island, and as no check can be made of the quantities used for these two purposes, the exact total weight of the products of the *Tugu* Industry is unfortunately not available.

With the exception of “prawn dust”, all fish and prawns landed in Brunei are for consumption within the State and there is no other export of these commodities.

Early in the year, Price Control of fish and prawns was extended to include the oilfield areas of Seria and Kuala Belait. Previously, price control was exercised only in the Brunei Town area and adjacent districts, and in spite of ‘movement restrictions’ being enforced on sea food produce landed Brunei, a large quantity of the daily landing was diverted to the oilfield area and resulted in a flourishing ‘black market’ and frequent shortages of sea food in the Northern half of the State. Extension of price control has ensured a satisfactory and fair distribution of fish and prawns landed in Brunei, and removed the incentive to ‘smuggle’ these commodities out of the area in which they are caught.

In 1955, ‘Exports’ of fish and prawns from Brunei to Seria were as follows:

Fish	471.05 <i>pikuls</i>
Prawns	250.00 <i>pikuls</i>

Marketing remains in the hands of a limited number of licenced merchants (*Towkays*). The '*Towkay*' system, largely finances the fishing Industry in Brunei, the fisherman obtaining the necessary and boats, and in some cases even food from his '*Towkay*', and is thereafter considered to be under 'contract' to hand over to the *Towkay* all the fish he catches. This system is open to abuse, and is not really satisfactory, for often the initial debt is out of all proportion to the fisherman's earnings and is carried on indefinitely. It is, however, of advantage during the monsoon seasons when for days the fisherman may be weather-bound and unable to put to sea.

The introduction of power driven craft, however, with, as can be observed from the foregoing tables, a resultant increase in the fisherman's returns, should in time enable the fisherman to become independent of the *Towkay* system, and consideration is now being given to a marketing scheme which it is hoped will to a large extent remove from the few licensed wholesalers the control they now exercise over sea produce after it has been landed.

(f) MINING

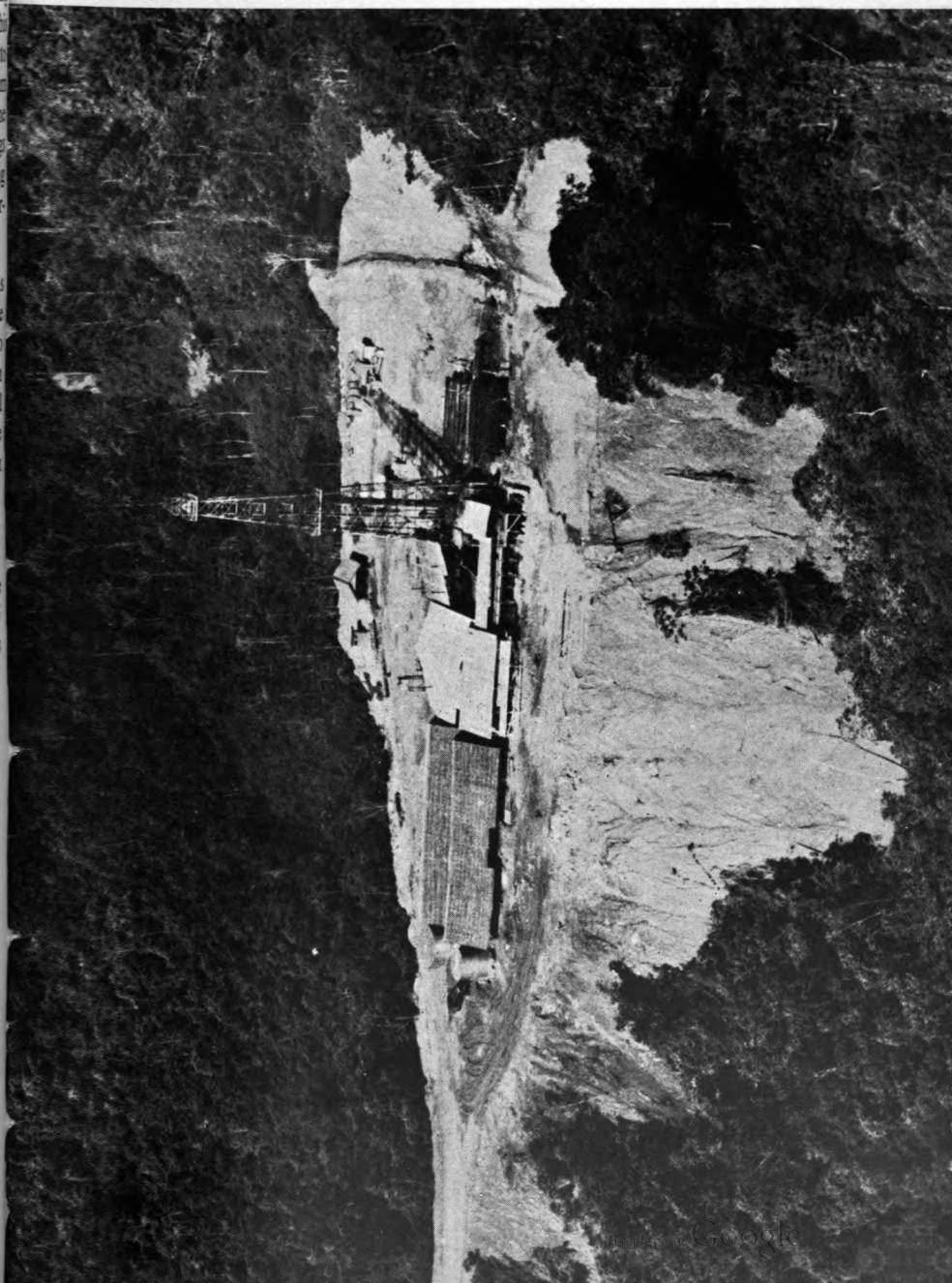
Production of light and heavy crude oil from Seria field by The British Malayan Petroleum Company Limited amounted in 1955 to approximately $38\frac{3}{4}$ million barrels, about four million barrels more than in 1954.

This increase was attained as a result of (a) improved production techniques resulting from a fuller knowledge of the oilfield's reservoir conditions and (b) the bringing into production of a larger number of wells, resulting from an appreciable speed-up in drilling operations.

Drilling operations involved the making of 209,900 feet of hole within the Seria field (compared with 168,000 feet in 1954), and as a result 34 new oilwells were completed, all of them producers. By the end of 1955 there were 292 wells in production at Seria: but it should be understood that this total fluctuates almost daily, as the older wells are subject to closure for maintenance work at sometimes frequent intervals.

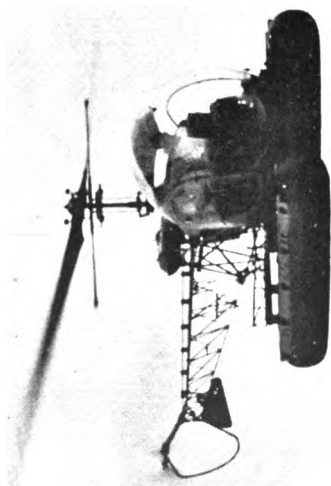
The oil produced at Seria is of two types: a light, waxy oil of specific gravity 0.83, and a heavy, non-waxy oil of 0.95 specific

Exploration
drilling rig at
Jerudong.



(by courtesy of
B.M.P. Company,
Seria)

B.M.P. Compar
helicopter in
flight.



(by courtesy of
B.M.P. Company,
Seria)

gravity. The heavy oil forms about 10% of the field's production. During 1955 a great deal of time and money were devoted to devising methods of mitigating the formation of wax deposits in the oilfield's installations as a result of the handling of the light oil, and some progress was achieved in keeping the pipelines and tanks free from these accumulations.

Geological and other exploration work went on throughout the year. Exploration drilling on a considerable scale in the Labi area failed to produce any worthwhile results, and was abandoned in the middle of the year. The oil company had built a 26-mile road through jungle from Bukit Puan (on the Belait River) to Bukit Teraja, inland, in pursuance of these operations. This road resulted in considerable benefit to the small communities living in the Labi area, and by arrangement between the Government and the B.M.P. Company was acquired as a State road when drilling operations were abandoned.

A potentially important development occurred at Jerudong, an area roughly midway between Tutong and Brunei Town, where in 1955 the B.M.P. Company drilled three exploration wells and prepared a fourth site for drilling. One of the wells produced what the Company described as an "interesting" show of oil, although by the end of the year the exact run of the oil-bearing formation had not been located, and it was too early to say definitely that the discovery would have commercial significance.

Oil exploration at Jerudong had the unfortunate by-product of helping to break down the surface of the main road from Brunei Town to Jerudong. Unusually heavy rains and the extra traffic occasioned by the passage of large oil company vehicles rendered parts of the road virtually unusable for periods extending to a week and more. Prompt action by the Public Works Department, assisted by a fleet of heavy transport units loaned by the oil company, quickly restored the road to usable condition, but there was at one period a considerable dislocation of traffic.

Work continued during 1955 upon the drilling of wells into the bed of the South China Sea, from marine platforms erected in the sea about a mile off the coast at Seria. By the end of the year four such platforms were in use, or about to come into use—three served by aerial ropeways from the shore, and the fourth

connected to the beach by a long Bailey Bridge. Potentially satisfactory results are being obtained from this sea-bed drilling, and a great deal of knowledge is being gained to add to the picture of the complicated underground structures in and around the Seria field.

The coastal waters of Brunei and Northern Sarawak were the subject of intensified geophysical investigation during 1955, when a seismic survey ship was employed by the B.M.P. Company to obtain information about possible oil-bearing formations beneath the sea-bed. Helicopters (which are mentioned later in this chapter) were used to provide communication between the ship and shore.

At the end of 1955 the B.M.P. Company had on its books in Seria, Kuala Belait and Brunei outstations the following employees:—

Senior Staff (all races)	403
Regional Staff (all races)	1,001
Labour (all races) (excluding casual labour)	4,320

In addition, 2,360 workers were employed in the oilfield area by contractors working virtually whole-time for the oil company.

The year 1955 saw a continuation of the consolidation noted in 1954. The building of permanent houses for staff and labour continued at a high pitch, and many capital development schemes which had been held up by equipment shortages abroad were brought into operation. For example, a new water-intake plant was installed at Badas, on the Belait River to serve a system of filter-beds erected in the industrial area of the oilfield itself. As a result, all domestic and much of the industrial water supply of the area now consists of purified and chlorinated water.

A new communications centre was opened, and associated with it went a re-organisation and improvement of the oilfield's large internal telephone system. Oilfield drainage—a particular problem in this low-lying area—continued to receive a great deal of attention, while work was continued on further sections of the sea-wall designed to protect the coast at Seria from erosion by the sea.

A large cold-storage food shop was opened at Seria to serve the oilfield community, replacing a temporary installation which had been in service since the end of the war. This installation is one of the best in south-east Asia, and in addition to providing fresh and frozen foods for the oilfield itself, continues the tradition of making cold storage supplies available to approved Government and other customers throughout the State.

A hotel was completed and opened at Seria for the housing of Company official visitors and staff, and another 3,000 k.w. alternator was brought into service at the Company's power station to help deal with the increased electrical load of the oilfield area. Seria bazaar was, by Government-Company arrangement, brought into the Company's electrical network, and the Government's generators were transferred elsewhere.

New major overhead power lines were laid in the oilfield area, and the electrification of such services as oil pumping at tank groups and the pumping of oil from the less active oilwells continued to expand.

As in previous years, the B.M.P. Company continued to pay much attention to the question of accident prevention. The prosecution of vigorous campaigns secured further reductions in industrial and traffic accidents. The Company continued to issue safety equipment free to its industrial workers, and also to subsidise their purchase of safety footwear.

Major schemes in progress at the end of the year included the erection of a new club for senior staff, swimming pools for Regional and Senior Staff (a new Regional Staff club is to be started in 1956), and (on the medical welfare side) plans for the coming into operation early in 1956 of a "Health Visitor" service designed to increase the post-and ante-natal facilities available for expectant mothers, and to supervise the health of all oilfield children up to the age of ten.

B.M.P. continued to operate its own aviation service, both for internal transport purposes and to provide a link with the main-line airfield at Labuan. During the year, Company aircraft made about 6,250 flights, carried 17,543 passengers and 3,200,000 pounds of freight, and used 72,000 gallons of aviation gasoline in so doing. Special flights were made for the carriage of V.I.P.'s, for ambulance purposes, and for photographic reconnaissance.

An interesting addition to the Aviation Department's activities was the arrival on charter of two helicopters which were used for general local transport purposes, and for communication with outstations and the marine drilling platform.

The land and sea transport departments of the Company's activities were somewhat curtailed as a result of the increase in these services available from outside organisations. The B.U.T.C., a Government-aided 'bus company, took over many of the recreational and shopping runs hitherto provided by the Company's own transport, while there was an increase in the amount of chartered sea-tonnage to convey goods to the oilfield from the deep-sea port at Labuan. However, B.M.P.'s own vehicle fleet consisted of 115 heavy vehicles, 483 cars and light vehicles, 34 'buses and trailers, and 129 motor-cycles at the end of the year. Company 'buses carried a total of 2,282,945 passengers during the year, while its lorries moved 348,995 tons of supplies and equipment. The sea transport department operated 26 coastal craft, which between them carried 114,000 tons of cargo and 4,117 passengers.

A locally-important development in the Company's operations during 1955 was an extension of its policy of "sharing prosperity"—placing more work in the way of small local contractors, enabling them to build up their businesses in the service of the oilfields. B.M.P.'s policy is, wherever possible, to confine its operations to matters concerned strictly with the winning of oil. As many background services as possible—house maintenance, grass cutting, civil engineering and building and the like—are being put out to tender by local contractors, and will continue to be so dealt with as long as efficient service is obtained.

The educational work of the B.M.P. Company's Trades School has already been referred to elsewhere in this Report, as have the many welfare services maintained by the Company on behalf of its staff and labour.

To summarise oilfield developments during 1955, it may be said that Seria has passed out of the post-war rehabilitation period, and is now operating to a planned routine. The oilfield continues to expand its social amenities, without in any way diminishing its progress as one of south-east Asia's biggest, most complex, and most productive industrial units.

CHAPTER VII.

SOCIAL SERVICES

(a) EDUCATION

THE year 1955 has been the first full year in the operation of the Development Plan for Education in Brunei. The most outstanding developments during the year have been—

(a) secondary education in the State has now reached junior secondary level (up to the Sarawak Junior Certificate Examination);

(b) the vexed question of the settlement of reasonable Government financial aid to Chinese schools (half the total recurrent cost);

(c) three and a half million dollars have been spent in the Development Plan out of a total of some ten million dollars for the five-year period;

(d) the constitution of an Education Advisory Committee.

This Report is divided into two parts:—

1. The work of the Education Department during 1955.
2. The progress of the Development Plan (1955-60).

1. THE EDUCATION DEPARTMENT DURING 1955

Another substantial increase in school enrolment must be noted. The total enrolment for the year in all types of schools was 8,632 children, showing an increase on 1954 of 1,451. The rough percentage of increase of children in all schools was about fifteen percent rise. The most encouraging feature is the gradual rise in the number of girls now attending school. During 1955 there were 2,853 girls in school showing an increase of nearly 600. Even so, the proportion of boys to girls in school is 2:1. For a clearer and more detailed picture of respective increases readers are referred to the statistical tables farther on in this Report.

The low ratio of girls to boys in Malay Schools is still very marked but there was an increase of over 400 Malay girls during the year. Much of the reluctance of parents to send their girls to school is due to the scarcity of trained women teachers in the primary schools. It is assumed that there must be some 6,000 Malay children of school age living in the State. If this is correct there are very few Malay boys not attending school but there must be over 2,000 girls of school age still staying at home. Much propaganda has been carried out by the Education Department especially through the contacts with parents at school functions, including Parents' Days, physical training and garden competitions, and sports events organised by the schools. Even when girls are sent to school by their parents very few remain to take even the Primary IV Examination and therefore fail to qualify for junior secondary education in the Government English Schools.

Turning to secondary education, it is heartening to see the rise in numbers of both boys and girls. There were over 100 extra children receiving secondary education (either English or Chinese) during 1955, not including some 30-odd children receiving secondary education outside the State.

Malay Vernacular Schools — Government:

During this year eight more schools were opened in temporary *kajang* buildings. They were sited at Sukang, Birau, Layong, Rambai, Masin, Pangkalan Batu, Batu Apoi and Jerudong. The usual financial aid was given to each community building these schools which is a \$400 Government grant to help the *kampung* people to purchase the necessary materials. All labour is provided free by the local community. Already under the Development Plan the building of permanent schools has commenced at Pangkalan Batu and Masin. The following schools were provided with permanent school buildings by the end of 1955. They are Puni, the first permanent school to be built under the Development Plan, Penanjong, Sinaut and Baru Baru. All these schools have additional permanent quarters for teachers. The standard of the housing of teachers in Brunei is without doubt the best in Borneo. Wherever permanent quarters for teachers are built, the teachers feel very much happier and settled in their family life. It has been noted that wherever a new school building is erected, the village people tend to move their houses

nearer to the school and it is good to report that the village school building is becoming more and more the centre of village social life. The biggest problem in housing teachers is in urban areas. Under the Development Plan there has been a remarkable rise in the influx of regional, technical officers and as with regional teachers on contract with the Department it is necessary to build temporary *kajang* quarters for such officers. The ultimate solution is the erection of teachers' flats, the first of which will be completed in the middle of 1956.

Several schools have benefited from additional minor works in improving the present school buildings but the largest amount of money has been spent in the preparation and drainage of playing fields. When siting a school, generally near a road or on the bank of a river, priority in selection of a site is given where there is sufficient level space to provide at least a fullsize football field adjacent to sufficient space for a school garden.

Parents' Day or *Huri Ibu Bapa* continues to be a popular feature in all these schools. Over \$13,000 was collected from parents and friends of the schools by the Headmasters of the Malay Schools during 1955. This sum is matched by Government in the form of a free grant on a dollar-for-dollar basis. Supervisors, Headmasters and teachers deserve much credit for the amount of work, organisation and keen enthusiasm which go into these happy gatherings of parents and pupils.

The Malay School gardens continue to be a source of pride to all concerned and \$1,739 was collected from the sale of vegetables and fruits this year. Prizes were won for the best school gardens as follows:—

1. O.K.S.B., Kilanas.
2. Bangar, Temburong.
3. Puni, Temburong.

Although football is the favourite game of all Malay boys, badminton is coming more and more into the picture. Wherever possible a badminton court is made on the playing field of each school. The Annual Schoolboy's Football Competition was won again this year by the Government English School, Seria. Runner-up was the Bukit Bendera School, Tutong. Physical training

competitions were again held in all rural areas with practically every school sending a representative team. The final placings given by the judges were as follows:—

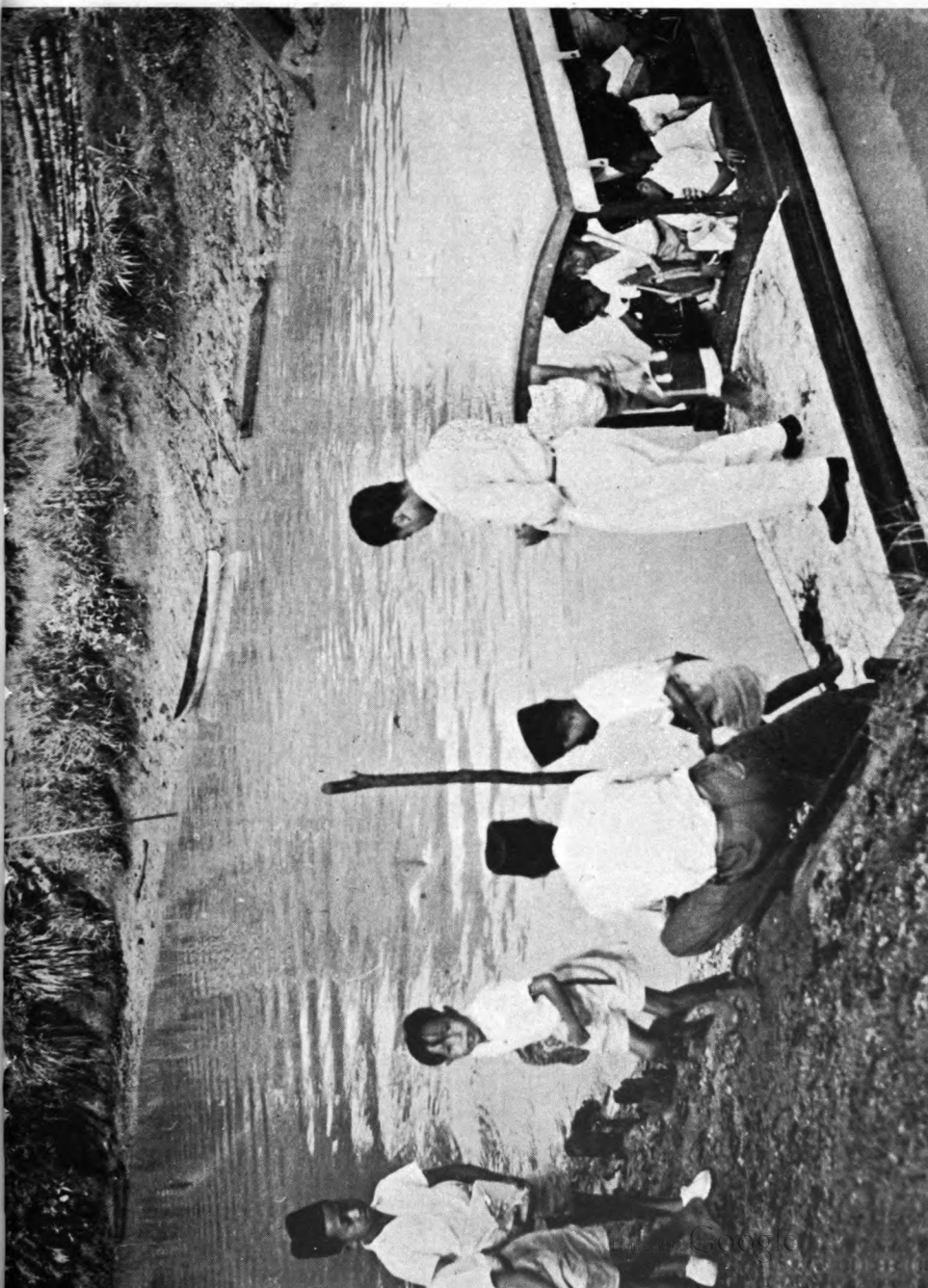
1. S.M.J.A. School, Brunei Town.
2. Bukit Bendera School, Tutong.

An added impetus to the teaching of physical training and organised games has been given by the arrival of an expatriate officer from the United Kingdom who is an expert in this vital subject.

There is no diminution in the demands from parents for their children to be taught English as a second language. There were over 400 Malay and Chinese children tested for possible entry to the preparatory departments of the Government English Secondary Schools. Some 200 children gained admission to these schools at the end of the year. Those who failed to get in revealed genuine disappointment and considerable heart-burning, both the children themselves and their parents. The teaching of English in the Malay Schools is still our biggest problem but with the arrival in August 1956 of the first batch of Kirkby teachers the problem will gradually disappear. This scheme will build up to a total of fifteen Kirkby-trained teachers, but it will take several years before the teaching of English can be really effective as a second language in these schools. As an interim measure three regional trained women teachers have been posted to the three largest urban Malay Schools.

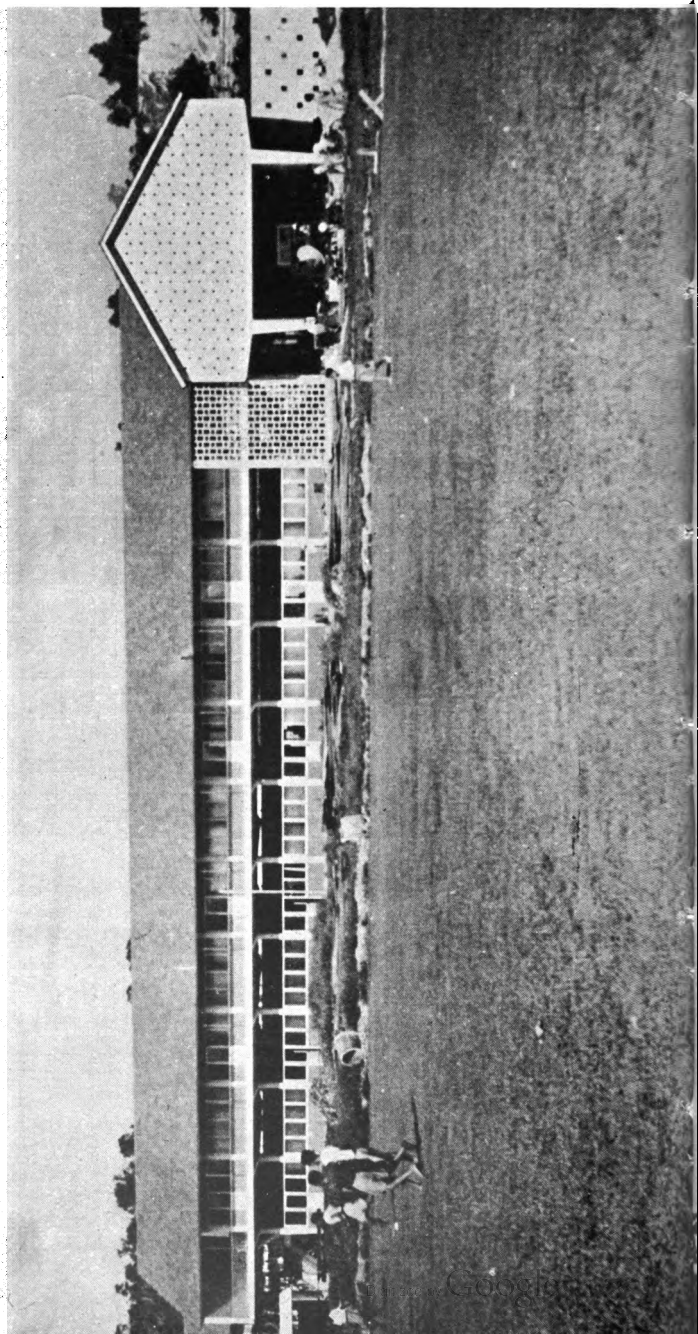
The number of children staying on to Primary V and VI continues to grow each year, and remains the only recruiting ground at the moment for very junior Government posts, including probationary teachers. It is confidently anticipated that during the Development Plan recruitment for prospective teachers and Government employees will pass on to the Government Secondary Schools. The paucity of English teaching in the general curriculum of Malay Schools has already been mentioned and it has been found that having been forced to transfer several vernacular teachers to the preparatory departments of the secondary schools has weakened at least two staffs of the primary schools in the urban areas. 1956 will be a lean year for additional trained teachers. This is due to the Malay teachers training being extended to three years. Therefore there is no output from Batu Lintang during this year. It is considered that the teaching of

Coming to School
by water-bus.



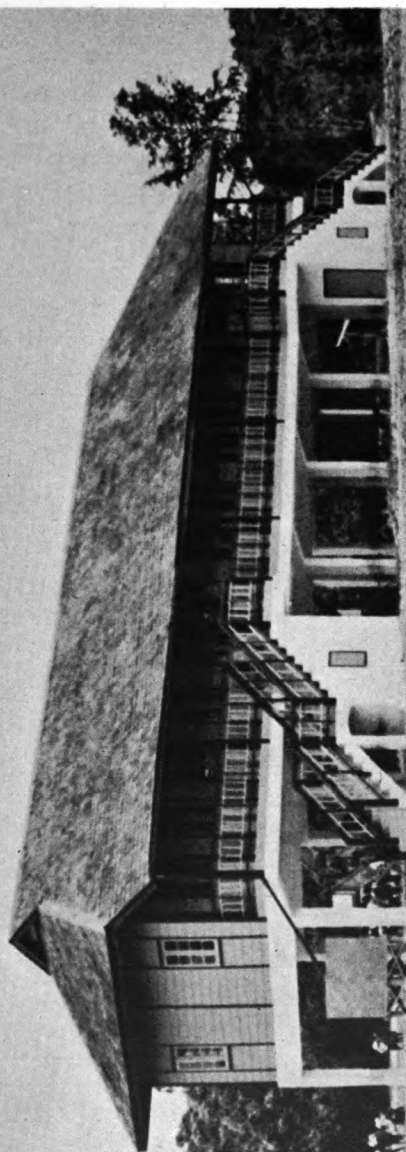
(Information Service
photograph)

Classroom Block
Sultan Omar Ali
Saifuddin's
College Brunei—
Phase I.



(by Courtesy of
Brunei Press,
Kuala Belait)

Sinaut School—
Typical example
Rural schools
now being built.



(Information Service
photograph)

His Highness
visiting Girls'
School (tem-
porary building)
Brunei.



(Information Service
photograph)

Malay is not as high as should be desired in a Malay State and steps have already been taken with regard to the revision of the curriculum and time-tables with the gradual introduction of more up-to-date Malay Primers and textbooks. In the secondary schools the continuation of Malay studies up to the School Certificate level is compulsory for all Malay pupils. Religious instruction continued to be given by religious teachers from the Department of Religious Affairs.

Teacher Training (Malay):

Statistical tables are given in this Report. The Brunei Government revised its policy in continuing to send students to Batu Lintang Training Centre at the end of the year. It has now been found possible to include a small teacher training centre in His Highness's College, Brunei Town, and from January 1956 there will be 21 students housed in temporary buildings pending the completion of a new annexe to the College. The maximum number of students will be 42 men. The new annexe will comprise adequate classroom space, dormitory accommodation, store rooms and living quarters for the staff. Recruitment is proceeding for a Principal and an English specialist for the staff of this new project. It is intended to integrate the practical training of these students with the facilities already provided for the secondary school students in the college. These facilities will eventually comprise woodwork, metalwork, local handicrafts, art, library, general science, gymnastics and organised games facilities. The temporary staff includes an expatriate officer as Acting Principal, a trained graduate seconded for service from the Johore Government and a local Group Teacher.

The six girls undergoing training at Kent College have made most satisfactory progress in this experimental scheme this year. A further intake of six young women has already been recruited, and next year there will be a total of twelve women undergoing training in this teachers' institution. It is confidently anticipated that as the secondary education of girls develops, the field of recruitment will continue to widen. Our probationary women teachers continue to be handicapped by their extremely poor knowledge of English. Three vacation courses have been successfully organised by a Lady Education Officer. The majority of probationary teachers, both men and women, attend evening classes in the urban areas.

Comparative Tables are given below:—

	1954	1955
1. Trained Teachers (men)		
(a) Sultan Idris Training College, Malaya	28	29
(b) Batu Lintang Training Centre, Kuching	43	50
2. Trained Teachers (women)		
Malay Women's Training College, Malacca	4	5
3. Untrained Teachers		
(a) Men	27	27
(b) Women	4	3
4. Probationers		
(a) Men	74	74
(b) Women	8	22
5. Temporary Teachers		
Men	—	—
Total	188	210

Number of Teachers undergoing Training Overseas—1955:—

1. Sultan Idris Training College, Malaya	2
2. Malay Women's Training College, Malacca	2
3. Batu Lintang Training Centre, Kuching	35
4. Kent College, British North Borneo	6
Total	45

Chinese Schools:

At long last the vexed question of the Government award of adequate financial assistance to Chinese School Committees has been solved. At the meeting of the State Council in October, the Council approved the award of a free Government grant to cover half the cost of recurrent expenditure in these schools for 1956 in addition to substantial grants towards school buildings. The new terms of this generous offer were accepted by all the Chinese communities after addresses to these communities by the State Education Officer. The major condition which has already been accepted is that half the school committee shall be appointed as Government representatives by the State Education Officer who also has the authority to appoint the Chairman of these school committees. The year 1956 will be in the form of an experiment but there is no doubt that with the goodwill and

co-operation of the Chinese communities with the Government a sound system of regulations applying to Chinese schools can be evolved. The total estimated expenditure for these Government grants will be around a quarter of a million dollars not including a possible expenditure of some \$200,000 in form of free Government grants for approved new school buildings. Generally speaking, all Chinese teachers will now receive a rise in their salaries of some 25 percent. Already the recruitment of Chinese teachers both in quality and quantity showed a marked improvement at the end of 1955. The general feeling of unrest among Chinese teachers has practically disappeared and there is no reason to doubt that the required qualifications for Chinese teachers will be reflected in the new recruitment for future vacancies. During 1955 a sum total of \$109,000 was awarded to school committees who had built new schools or additions to their present buildings. The major building project which was started during this year was at the Chinese School, Kuala Belait. The Government in Brunei is anxious that the standard of building of Chinese Schools will show improvement in the future so as to be commensurate with that high standard of public buildings now being erected by Government in the State's Development Plan.

Secondary Education (English):

This has been an important mile-stone in the progress of secondary education in Brunei. For the first time in the history of Brunei an external examination was held in three junior secondary schools. The entrants and results were as follows:—

<i>School</i>	<i>Entrants</i>	<i>Passed Sarawak Junior Cert.</i>	<i>Approved Form III Cert.</i>
St. Michael's R.C. School, Seria	10	6	3
Government English School, Seria	9	7	—
Sir Omar Ali Saifuddin College, Brunei Town	12	7	—

This result has been most encouraging to the staffs of these schools and it has now been found possible to start a Senior Certificate (Cambridge) course next year lasting two years with some 16 students who have passed the Sarawak Junior Certificate Examination.

Two more expatriate officers for these schools arrived during the year, one a graduate in Science, and the other a specialist in physical training and youth work.

At the end of this year, the first phase of His Highness's College was opened. This comprises the following new buildings—

- 16 form rooms
- Staff room
- Principal's room
- Office
- Store rooms
- Tuck shop
- Lavatories.

The new hostel was nearly completed and will be available for 120 boys and youths by the end of March next year. As a temporary measure some classrooms have been made into practical rooms pending the completion of Phase 2 of the College buildings. Practical facilities now include art, general science, local handicrafts, woodwork. It may well be that January 1957 will see the completion of the whole of the buildings of the College. The second phase will include the following buildings in addition to the Teacher Training Centre:—

- Woodwork Room
- Metalwork Room
- Air-conditioned Library
- Chemistry, Physics and General Science Laboratories
- Commercial Room
- Art and Local Handicrafts Room
- Hostel Master's Flat.

The final stage will be the completion of an auditorium seating 600 persons with an adjoining modern gymnasium and dining room facilities. It will now be possible with the completion of permanent buildings to give each pupil a modern secondary education with separate streams taking one of the following courses:—

- (a) Commercial
- (b) Pre-technical
- (c) Pre-agricultural, rural science
- (d) Advanced studies in Malay or Chinese
- (e) One stream proceeding to the Cambridge external examinations leading to university degrees and diplomas.

There are now thirty masters and mistresses on the staffs of the two Government Secondary Schools. The only difficulty

for future recruitment is finding adequate housing accommodation for regional officers on contract under the Development Plan.

Tenders have been placed for permanent buildings for the Seria Government English School.

The Roman Catholic Mission School at Seria continued to improve the quality of its teaching staff and completed the first phase of their new school building project. This included a large classroom block accommodating some 600 children. The Advisory School Board for Catholic Schools continued to meet regularly with the State Education Officer as an ex-officio member. As the grants for mission schools will be doubled next year it is confidently anticipated that more and more trained teachers will be recruited for this important Catholic School.

The British Malayan Petroleum Company continued to award scholarships to selected children of their employees (\$500 for each child annually) tenable at any recognised secondary school. Eleven extra children were awarded these scholarships at the end of 1955. Six children were pupils at St. Michael's School, Seria, two at St. Columbus's School, Miri, and three outside the Borneo territories. Instituted in 1951, a total of 47 such scholarships have been granted, 35 children are still benefitting from these grants and the cost to the Company is in the region of \$20,000 annually.

Vocational Training:

The following table gives the number of youths in training at the British Malayan Petroleum Company's Apprentices Trades School, Seria, 1955:—

<i>Race</i>	<i>1st Year</i>	<i>2nd Year</i>	<i>3rd Year</i>	<i>Total</i>
*Malay	26	27	8	61
Chinese	34	27	23	84
Indian	1	2	—	3
Dusun	—	—	1	1
Melanau	2	2	4	8
Dyak	3	2	3	8
Eurasian	1	1	—	2
Burmese	—	1	—	1
Philippino	1	—	—	1
Total	68	62	39	169

*includes Government students

Through the Development Plan the Brunei Government's scheme is progressing satisfactorily whereby 20-25 Malay youths are sent for vocational training to the Trades School, being taught solely in the vernacular. The total number at present is 23 second year and 15 first year students. This is definitely a scholarship scheme and not an apprenticeship scheme. Under the five-year Development Plan, 1956 will see the maturity of this particular scheme and it is confidently anticipated that should this scheme continue, further intakes after 1956 will be equipped with sufficient English to enable them to be taught in English and not the vernacular. It may be mentioned that several boys found it very difficult to settle down in the Trades School and Hostel, being suddenly plunged into a highly organised industrial system. The majority of the boys participating in this scheme have come from country districts. On completion of their course, these boys will be awarded a bonus according to their attainment in English. They are all encouraged to learn English in Adult Evening Institutes. Details of the cost of this scheme are given in the Notes on the Development Plan.

Adult Education:

The two Government Adult Evening Schools at Seria and Brunei Town continued to function successfully throughout the year. The enrolments have been considerably higher and at the end of the year all students were examined and graded in the following grades:—

Grade I	— Primary 2 —	66 passed
Grade II	— Primary 4 —	40 passed
Grade III	— Primary 6 —	36 passed

As an experiment it was decided to hold examinations set by the Royal Society of Arts. There were 111 entries, the majority being for the subjects English for Foreigners, Typewriting and Shorthand. The results of these examinations are awaited.

At the moment the Department cannot keep pace with demands for classes in semi-urban districts.

No attempt has yet been made to start an adult literacy campaign in Malay. However, recruitment of the right type of

officer is proceeding and it is anticipated a start can be made next year.

There were 450 students attending Adult Evening Classes in English subjects during 1955.

School Feeding:

The School Feeding Scheme under the Medical Department was modified during the year as urban schools were given a vitamised drink for each child on every school day but in the country districts the usual well-balanced curried meal was served. It is intended at the end of the year to hand over this Scheme to the Education Department. Next year the whole Scheme will be decentralised whereby each Principal or Head Teacher will be responsible individually for carrying out this Scheme. \$493,970 was spent during the year and the following numbers of school children were included in the Scheme:—

Children receiving full meal each day	1,999
Children receiving vitamised drink	4,174

The guidance given by the Medical Department again deserves special praise and it is worthy of record that the majority of Head Teachers and Assistant Teachers have co-operated well and have given their service and time ungrudgingly to the welfare of all children participating in this very important Development Plan Scheme.

Medical Attention in Schools:

Medical attention continued in schools throughout the year. Preliminary stages were investigated prior to launching a scheme regarding Defective Vision. Two thousand nine hundred and twelve Mantoux Tests were carried out as part of the B.C.G. Campaign. There were 365 Vaccinations (Smallpox), whilst during the year a Dental Officer carried out a limited amount of work with 1,832 patients.

All pupils admitted to Government English Schools and students proceeding to Teacher Training Centres overseas together with students for the Trade School, B.M.P. Co., Seria were medically examined prior to admission. The total number was 260.

PRIMARY EDUCATION 1955

Age Groups	Primary 1		Primary 2		Primary 3		Primary 4		Primary 5		Primary 6	
	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.	B.	G.
Under 6	172	146										
6 — 7	566	352	69	58	1	2						
7 — 8	507	300	202	108	27	19	2	1				
8 — 9	284	174	260	113	125	42	17	8				
9 — 10	155	101	233	112	180	79	45	20	1	3		
10 — 11	94	58	118	61	167	80	109	31	14	8	1	1
11 — 12	51	11	95	45	180	77	173	63	51	22	10	8
12 — 13	27	12	73	23	96	47	224	81	93	33	43	27
Over 13	6	7	56	21	74	45	264	96	410	142	265	123
Totals	1862	1161	1106	541	850	391	834	300	569	208	319	159

Total Boys: 5540 Total Girls: 2760

SECONDARY EDUCATION (ENGLISH AND CHINESE) 1955

SOCIAL SERVICES

81

Under 11 years	...	...	Form One (1st Year)		Form Two (2nd Year)		Form Three (3rd Year)		Totals	
			B.	G.	B.	G.	B.	G.	B.	G.
11 — 12	...	...	—	3					—	3
12 — 13	...	...	3	3	—	2			3	5
13 — 14	...	...	13	6	1	2			14	8
14 — 15	...	...	23	15	5	1			28	16
15 — 16	...	...	21	9	13	9	1	2	35	20
16 — 17	...	...	36	16	16	7	3	2	55	25
17 — 18	...	...	17	12	23	4	10	1	50	17
18 — 19	...	...	8	4	9	3	7	—	24	7
Over 19 years	...	...	1	2	5	3	7	4	13	9
Total Boys: 222			Total Girls: 110							

ANALYSIS SCHOOL ENROLMENTS—1955—RACIAL ALL SCHOOLS

<i>Race</i>	<i>Boys</i>	<i>Girls</i>	<i>Total on Roll</i>
Malay	2,643	905	3,548
Chinese	2,143	1,532	3,675
Indian	67	58	125
Eurasian	46	44	90
Kedayan	459	101	560
Dusun	240	97	337
Others	181	116	297
<hr/>			
Totals	5,779	2,853	8,632
<hr/>			

2. THE DEVELOPMENT PLAN

The Development Plan for Education entered its second year of the scheme. All schemes are now in operation with the exception of (a) Adult Literacy in Malay, and (b) the Production of Vernacular Literature.

By the end of the year approximately one third of the cost of all schemes had been spent, the largest amount being spent on new school buildings. Contracts were placed at varying times during the year for two new secondary schools, three large urban Malay Schools, and 21 country schools. By the end of the year building operations had commenced at 14 sites and the buildings are in various stages of completion. All contracts included teachers' houses and facilities for the School Feeding Scheme. The programme of providing new primary accommodation should be completed by the end of next year. The secondary schools will take longer to complete as they constitute major building projects.

The following tables together with notes are self-explanatory:—

DEVELOPMENT PLAN—SUMMARY OF COST OF SCHEMES (PART I)

<i>Name of Scheme</i>	<i>Total Cost</i>	<i>Expenditure 1954</i>	<i>Expenditure 1955</i>	<i>Total Progress Expenditure</i>
1. School Buildings (Primary)	\$4,236,000	309,335*	1,267,515	1,576,850
2. School Buildings (Secondary)	4,102,000	203,871	632,429	836,300
3. School Equipment (Primary)	264,000	72,000*	72,765*	144,765
4. School Equipment (Secondary)	398,000	99,200*	84,196	183,396
5. Trade School Buildings B.M.P. Co.	300,000	27,881	250,000	277,881
6. Trade School (Recurrent) B.M.P. Co.	700,000	36,368	78,767	115,135
7. Kirkby Teacher Training Scheme	150,000	—	48,817	48,817
8. Building Grants to Mission and Chinese Schools	500,000	50,000	115,000	165,000
	\$10,650,000	798,655	2,549,489	3,348,144

*Partly from Part I Estimates.

NOTE: Approximately *one third* (\$3,348,144) of the total amount of Approved Schemes totalling \$10,650,000 has been spent from August 1954 to December 31st, 1955.

DEVELOPMENT PLAN — PROGRESS OF SCHEMES 1955

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
1. Teachers' Training			
	60,000	1. Batu Lintang Training Centre	(a) Thirty-five students were being trained during the year. As this is now a 3-year course there were no graduating students this year. It is anticipated that Brunei will start its own Training Centre during 1956.
	15,000	2. Kent College, North Borneo	(b) Six women students entered the College for the first time in March 1955. All are making satisfactory progress. A further six women have been selected for entry in January 1956.
		3. Kirkby College, Liverpool, U.K.	(c) A further five students—3 men and 2 women students from Malaya—were selected by the S.E.O. in Kuala Lumpur during May 1955. There are now ten students being trained for secondment to the Brunei Service. The first output of these teachers will be in July 1956. A further five will be selected during 1956 when the scheme matures.
	12,000	4. Sultan Idris Training College, and Malacca Women's Training College	(d) There were 2 men and 2 women in training during 1955.

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
2. Scholarships	20,000	Overseas	(a) Colombo Plan. (Australia) One scholarship in Civil Engineering. One scholarship in Agriculture. One scholarship in Public Administration. One scholarship in Electrical Engineering. There are 8 applications for Australian Correspondence Scholarships (Colombo Plan).
	30,000		(b) United Kingdom (local funds) One scholarship in Social and Public Administration. One scholarship in Agriculture. Two scholarships in Local Government. Two scholarships in Secondary Education.
	15,000		(c) Malaya and Sarawak Three scholarships in Agriculture at Serdang. One scholarship in Teacher Training, Singapore. One scholarship in Agriculture at Kuching.
	16,000	Local (Regional)	(d) Local Scholarships (i) 5 were awarded to Malay Boys for Secondary Education in Singapore and Malaya. (ii) Four were continued for Malay Boys in St. Thomas' School, Kuching, one Chinese boy in Sibn and one Chinese girl at St. Mary's School, Kuching.

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
2. Scholarships	14,762	Educational Study Tour, United Kingdom	(e) Four selected Supervisors of Primary Education were sent to the U.K. under the auspices of the British Council in May. They returned in August. Sir Patrick McKerron acted as interpreter/guide.
3. School Buildings and Equipment	1,340,280	Primary	(a) Preparation of sites and building operations commenced during the year at 14 Primary Schools of which four were large schools in Urban Areas. Four schools with ten teachers quarters were completed. Five houses were completed for the Supervisory Staff.
	801,625	Secondary	(b) The first Phase of the new Boys Secondary School, Brunei Town, was completed with the exception of the Hostel for 120 boys which will be completed by February 1956.
			(c) Piling was completed for the new Teacher Training Centre and this project consisting of classrooms, dormitory, tutors flats, will be completed by July 1956.
			(d) Considerable earthworks and preparation of the site for the Second Phase of the new Boys Secondary School, Brunei Town, were completed. Five Temporary Quarters were completed for Regional Government English Teachers.

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
3. School Buildings and Equipment			
(c)			Sites were prepared and soil tests carried out for the new Girls High School, Brunei Town, and two houses built for Lady Education Officers. Tenders have been called for the new Government English School, Seria. A Domestic Science Centre was opened in Brunei Town.
			The following Contracts were placed during the year:—
(a)	14	Primary Schools (Brunei District)	\$1,660,000
(b)	7	Primary Schools (Tutong District)	728,500
(c)	5	Quarters for Supervisory Teachers	123,100
(d)	3	Town Primary Schools	722,464
(a)	2nd	Phase Boys Secondary School, Brunei Town	985,000
(b)		Quarters for Secondary School Teachers, etc.	85,000
(c)	1st	Phase, Girls High School, Brunei Town	258,064
			<u>\$4,562,128</u>

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
4. Grants-in-Aid	115,000	Chinese and Mission Schools	Government Building Grants were made to the following Chinese Schools:—
		(a) Kuala Belait	... .. \$ 60,000
		(b) Seria	... .. 10,000
		(c) Tutong	... .. 15,000
		(d) Labi	... .. 12,000
		(e) Sungai Liang	... .. 12,000
		(f) Brunei Town (R.C. Mission)	... .. 6,000
			<u>\$115,000</u>
5. Expatriate Staff	100,000	Educational Officers from the U.K. and Regional Asian Staff	Building operations at the above schools were commenced either on new schools or additional units. Total expenditure to date under this Scheme was \$165,000. Two Education Officers arrived in May; one Science specialist and the other a Physical Training Specialist. Fourteen new Regional Teachers of English arrived during the year, eleven of whom were placed in local Secondary Schools and three in large Urban Malay Schools.
6. Technical Training	Buildings 250,000 Recurrent 78,767	Government participation in B.M.P. Co. Trades School	The second intake of 18 boys entered the B.M.P. Co. Trades School in May. There are now a total of 38 boys from Vernacular Schools. All boys were transferred to the new Trades School Hostel in October.

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
7. Adult Education	11,557	Literacy in English	(a) Adult English Education continued most satisfactorily throughout the year with a total number from all sources of 450. Examination results conducted by the Department were as follows:— Primary II — 66 Primary IV — 40 Primary VI — 36
		Various Subjects in English	(b) One hundred and eleven entries for the R.S.A. Examination mainly at Elementary level were received. The largest numbers sat for English for Foreign Students, Arithmetic, Typewriting and Shorthand. Results are awaited.
	3,974		(c) Seven entries were received from the B.M.P. Co. for the City and Guilds Examinations next year.
			(d) Three successful classes in Typewriting and Shorthand were held during the year.
		Malay Literacy	(e) No start has yet been made in the proposed Malay Literacy Campaign.
8. School Text-books, Visual and Aural Aids	48,270	Part I Estimates	A considerable improvement was made in the supply of Text-books and equipment for both Primary and Secondary Education. This improvement will extend to Chinese Schools next year.

<i>Scheme</i>	<i>Approximate Cost \$</i>	<i>Category</i>	<i>Notes</i>
9. Games, Physical Training Apparatus, etc.	9,335	Part I Estimates	Much improvement is being effected by the P.W.D. in levelling school playing fields, etc. Badminton, football and hockey equipment was supplied to many.
		Part II Development Plan	Gymnastic Equipment has been ordered to the value of \$7,000 for the use of the newly-arrived specialist in Physical Training. The usual P.T. Competitions were held in urban areas.
10. School Libraries	8,803	Part I Estimates	Over 3,000 books chosen by the British Council arrived for the Secondary Schools. Five hundred have been allocated to the Children's Section of the Kuala Belait Lending Library. A Traveling Library will start next year for which \$25,000 has been earmarked.
11. Production of Vernacular Literature	Unknown at present	Development Plan	Negotiations are proceeding for a Vernacular Publications Bureau to be started in Brunei.

Expenditure on Education during the year 1955:

The approximate total expenditure was as follows:—

(a) Part I Estimates	...	...	...	\$1,078,919
(b) Part II Estimates	...	...	...	2,549,489
Total 1955				<u>\$3,628,408</u>

Conclusion:

The past year has been one of considerable implementation of the Development Plan. The resultant pressure of development work on all concerned with the Plan has been cheerfully and loyally accepted by all connected with the Education Department. The willing co-operation of all Heads of Departments is gratefully acknowledged; outstanding Departmental Heads have been the Commissioner of Development, the State Engineer and the State Medical Officer. Advisory Education Committees, Head Teachers and Assistant Teachers, many of whom continued to work under very trying conditions, have shown again throughout the year their splendid loyalty and enthusiasm for bringing the approved education schemes to successful fruition within the limits of the Education Development Plan.

Head of Department:

Mr. H. J. Padmore continued as the State Education Officer throughout the year.

(b) PUBLIC HEALTH**MEDICAL AND HEALTH DEPARTMENT***Introduction:*

In the Annual Report of the Medical and Health Department for the year 1954, mention was made that the Annual Report for 1955 should give one a clearer picture of the work done, and that to come. This has proved true to a considerable extent, and it is hoped that the short summary of the Development Plan of the Department, which is included in this report, will assist the reader further in understanding the difficulties that have to be faced to achieve the progress that is so desirable.

During 1955 the problem of insufficient qualified staff still remained, but was not as acute as in the previous year, and towards

the end of the year adequate numbers of girls were coming forward for training, though only enough for our present needs. Housing was still a problem, but a number of building projects for the Department were in hand by the end of the year, which should help to ease this difficulty to a great extent during 1956, particularly for staff living in Brunei Town.

The main feature of note was the presentation and approval of the Development Plan of the Department. This Plan was prepared by the State Medical Officer—Dr. E. C. Vardy.

General:

The work of the Department, as before, was divided into that relating to (A) Hospitals and Dispensaries (B) Health Centres and Rural Clinics (C) Public Health as administered by the Health Department.

(A) HOSPITALS AND DISPENSARIES

The two main Government Hospitals in Brunei Town and Kuala Belait, and the two Dispensaries at Tutong and Temburong remained the only Government centres where patients could be admitted, when necessary, for treatment as in-patients. Facilities for out-patients remained the same as in the previous year with one important exception. This exception was the opening of an Eye Clinic on a temporary basis in the General Hospital, Brunei Town, and also in Kuala Belait, where cases were seen by the Ophthalmologist, who visits the State twice a year now, each visit lasting about one month. Ward accommodation was also made available for eye cases undergoing operative treatment by the Specialist. Outstation visits by Medical Officers were carried out at regular intervals whenever possible.

The figures for medical attendances for In-patients and Out-patients are as follows:—

MEDICAL ATTENDANCE

	1952	1953	1954	1955
<i>Brunei:</i>				
In-Patient	1,394	2,143	2,311	2,132
Out-Patient	30,256	35,965	27,860	30,058

Kuala Belait:

In-Patient	746	1,098	1,169	1,257
Out-Patient	32,157	45,449	35,981	36,455

Tutong:

In-Patient	69	83	261	100
Out-Patient	19,350	22,571	16,138	20,118

Temburong:

In-Patient	18	4	21	149
Out-Patient	6,200	7,986	7,820	8,148

Total In-Patients 3,638. Total Out-Patients 94,779.

There has been a slight decrease in the number of in-patients in Hospitals and Dispensaries, and a rise in the total number of out-patients treated. The increase in attendances in Temburong District is worthy of note, as the Department has had a difficult time in this area.

Numerous remote *kampongs* have been visited regularly by the Travelling Dispensaries stationed at Tutong, Temburong, and Kuala Belait, and though it is sometimes very hard work getting there, the numbers of patients treated make the trips worth-while most often.

Due to occasional bad weather which affected roads under repair, the Brunei Town Travelling Dispensary was not able to carry out its schedule regularly, though things were much better towards the end of the year.

(B) HEALTH CENTRES AND RURAL CLINICS

The Maternity and Health Centres continued to flourish, and the following comparative tables serve to show work and progress during 1955:—

HEALTH AND MATERNITY CENTRES

	1952	1953	1954	1955
<i>Brunei:</i>				
Attendance	4,108	3,482	3,250	5,316
Home Confinements	813	790	260	292

Kuala Belait:

Attendance	6,211	8,138	4,883	4,715
Home Confinements	279	3,25	395	425

Seria:

Attendance	—	—	3,485	4,872
Home Confinements	—	—	118	152

Tutong:

Attendance	525	532	561	427
Home Confinements	53	65	83	52

Brunei Kampong Ayer:

Attendance	—	—	1,431	1,583
Home Confinements	—	—	828	450

Temburong:

Attendance	—	—	404	287
Home Confinements	—	—	50	41

Sengkurong:

Attendance	—	392	503	328
Home Confinements	—	54	47	34

Muara & Sarasa:

Attendance	—	591	495	534
Home Confinements	—	24	37	38

RURAL CLINICS

	1952	1953	1954	1955
Berakas Estate	75	142	100	225
Lamunin	—	153	14	12
Baru Baru	—	130	126	93
Kilanas	—	63	93	27
Sinaut	—	50	104	397
Kiudang	—	61	30	—
Danau	—	115	105	64
Lumapas	—	50	44	241
Kumbang Pasang	—	99	59	63
Telisai	—	—	40	106
Batu Marang	—	—	62	217

SOCIAL SERVICES

95

Pengalan Batu	—	—	5	90
+ Jerudong	—	—	—	324
+ Kampong Bunut	—	—	—	230
+ Bar Bunut	—	—	—	135
+ Seradang	—	—	—	65
+ Kampong Puduk	—	—	—	103
+ Kampong Kupang	—	—	—	68
+ Kuilap	—	—	—	13

+ New Clinics opened in 1955.

SCHOOL VISIT ATTENDANCE

	1953	1954	1955
Brunei	2,332 pupils	3,673 pupils	831 pupils
Rural Area	34 pupils	223 pupils	—

TRAVELLING DISPENSARIES

	1952	1953	1954	1955
Brunei (Riverine)	1,143	1,446	1,968	1,911
Kuala Belait	1,325	3,208	3,621	4,091
Tutong	497	1,995	2,129	2,522
Temburong	1,268	1,180	1,217	2,258
Brunei (Road)	8,822	9,386	10,609	5,109

HEALTH VISITING

	1952	1953	1954	1955
Brunei	1,715	3,146	4,053	3,203
Kuala Belait	2,096	2,244	2,614	812
Seria	—	—	—	1,347
Tutong	336	3,054	1,762	2,987
Temburong	100	80	152	1,842

TOTAL ATTENDANCES FOR THE STATE

	1952	1953	1954	1955
In-Patients	2,227	3,328	3,760	3,638
Out-Patients	87,963	111,971	87,799	94,779
Births	2,809	2,903	3,332	3,600
Health Centres	14,639	25,807	28,303	22,019

Total Attendances 124,036.

One Clinic at Kiudang had to be discontinued due to poor attendances, but several new Clinics were opened during the year (as shown on page 95). At first there appeared to be a drop in the figures for the *Kampong Ayer* Clinic in Brunei Town, as compared with those given in the Annual Report for 1954, and this was investigated. It has been found however that there has been a gradual increase in the work carried out by this Clinic, despite the disparity shown, and it is encouraging to note that the people living on the Brunei River are now realising more and more the value of modern treatment.

The Health visiting figures in Kuala Belait District are now divided separately into those for the towns of Kuala Belait and Seria.

School visit attendances were not maintained as such due to shortage of staff. However vaccination teams visited school during the year, and a report on their work is given later. Regular visits were also paid by the Dental Officer based at Brunei Town.

(C) PUBLIC HEALTH AS ADMINISTERED BY THE HEALTH DEPARTMENT

The Public Health Section showed little change, and the situation here will remain difficult for the State Medical Officer until such time that a Health Officer is appointed. This is catered for in the Development Plan. Meanwhile the State Medical Officer continued to run this Section personally.

Detailed Progress Reports:

(A) HOSPITALS AND DISPENSARIES

I. GENERAL HOSPITAL, BRUNEI TOWN

During the year a new laundry house was completed, and also a new incinerator shed. The laundry equipment had not arrived by the end of the year, but the two incinerators were functioning satisfactorily. The walls of the Hospital appeared to have settled now, but falling tiles are still a problem, which we hope will be solved soon. Storage space has been a major problem, and this will continue until the new State Medical Store is built. After thorough disinfection, the Tuberculosis Annexe was converted to an Eye Ward for the visit of the Ophthalmologist.

During the year the Electrical Department erected a sub-station in the Hospital area, and this has altered the difficulties experienced previously, regarding the supply of electrical power. The total bed strength of this Hospital is 140.

Special Departments: (1) *Dental Department*—This Department is still expanding and is based in the General Hospital. However, with the arrival of a second Dental Officer in December, one Dental Officer will be posted eventually for permanent duty in Kuala Belait District. Trained junior staff are still required before the Department can really get down to work, though it has managed very well up till now. Schools were visited regularly and a considerable amount of dental work was carried out. Dental treatment is now welcomed by school-teachers and pupils, who show great interest and are very co-operative. Routine visits were paid monthly to Kuala Belait District. A certain amount of out-station travelling was also carried out by the Dental Officer.

(2) *Laboratory*—The work has increased in this Department which is under the charge of the Chief Laboratory Technician. It will be seen that the Laboratory covers a great deal of ground in its activities.

(3) *X-Ray Department*—Work continued as usual, with a slight decrease generally. The mass radiography machine has not been ordered yet, pending improvement in the staff situation. There is one portable machine and one large machine in the Hospital, and the work is managed by one trained X-Ray Technician in charge of the Department, who has received his training abroad.

(4) *Physiotherapy*—New machines arrived during the year, and this Department is fairly well equipped now, and treatments include Short Wave Therapy, Faradism, Galvanism, Ultra-violet Light, Massage, Exercises, etc. The Physiotherapist also deals with Occupational Therapy in the Hospital, which has proved most useful. Patients now make various types of toys, pictures, etc. and some of the exhibits were placed on view at the Agricultural Show held during the year.

(5) *Teaching Unit*—Training of staff continued till September when there was a break due to the departure of the Sister

Tutor on leave. Those receiving training include Probationer Hospital Assistants, Probationer Nurses, and Probationer Assistant Nurses. The following numbers were still undergoing tuition in the school at the end of 1955, and will resume lectures and practical classes when the Sister Tutor returns:—

Probationer Hospital Assistants	12
Probationer Nurses	6
Probationer Assistant Nurses	10

The first two groups receive similar training lasting three years, but the Assistant Nurses receive a simplified course of lectures and training lasting two years.

A significant step forward in the training of staff was the meeting in September between Matrons and Sister Tutors of Brunei, North Borneo and Sarawak, followed by a meeting of Heads of Medical Departments of these territories. The main object of these meetings was to try and standardise training in the three territories, and to work for recognition of such training by the General Nursing Council in the United Kingdom, even though this will take many years. On the whole, the school had a fairly successful year.

II. GOVERNMENT HOSPITAL, KUALA BELAIT

No new construction was undertaken during the year, though preparations were in hand to expand the Hospital so as to include beds for Tuberculosis cases, and the plans had been prepared by the end of the year. The staff problem in Kuala Belait still remains difficult, though matters will ease considerably once a Nurses Home is established there. The total bed strength is 30.

Special Departments:

(1) *Laboratory*—This was under the charge of a Laboratory Technician, and there was an increase in the work carried out during the year. The work done also covered the Seria Clinic.

(2) *X-Ray Department*—There is one portable machine in the Hospital, and the work is managed by a trained Hospital Assistant, who has received a certain amount of tuition locally in X-Ray work. The work in Kuala Belait District showed a considerable increase on the figures for the previous year.

III. TUTONG DISPENSARY

Preparations were in hand by the end of the year to start work on the new Dispensary site, which lies west of the Town. The bed strength of the present Dispensary is eight.

IV. TEMBURONG DISPENSARY

There was no construction undertaken here, though this Dispensary will be expanded eventually. The bed strength is eight.

(B) HEALTH CENTRES AND RURAL CLINICS

BRUNEI TOWN AND RURAL AREAS

The work here has been divided up between the land Health Clinic situated in the General Hospital Brunei Town, and the *Kampong Ayer Clinic*, with the land Clinic also looking after Rural areas. A considerable amount of work has been carried out in both Clinics despite difficulties regarding staff and transport.

(a) *Land Clinic, Brunei Town*—While maintaining and increasing the town clinic attendances, seven new Rural Clinics have been established at Jerudong, *Kampong Bunut*, Bar Bunut, Seradang, *Kampong Puduk*, *Kampong Kupang* and *Kuilap*. The staff shortage, however, made it necessary to discontinue the school hygiene inspections early in the year, but it is hoped to resume these in 1956. The present health visiting staff for Brunei Town (excluding *Kampong Ayer*) and Rural areas consists of one Health Sister, One Trained Nurse, and One Trainee Assistant Nurse. Seven Midwives manage the work in the Brunei Town and *Kampong Ayer* and it is proposed to transfer four of these Midwives to work in *Kampong Ayer* exclusively. Rural Midwives continued to work at Tutong, Sengkurong, *Kampong Sinaut*, and Sarasa. Two pupil Midwives were employed during the year. The bad road conditions often prevented visits to Lamunin and *Kampong Kupang*, and Danau and Baru Baru have not provided the good Clinic attendances hoped for in 1954. The issue of milk to ante-natal mothers in Brunei Town Clinic continued throughout the year and has proved of considerable value. Nestle's continued to contribute a monthly allowance of milk, and this generosity is much appreciated. There is a similar allowance of milk from the State, and all this is supplied free to the children of needy families. The Red Cross allowance of \$30.00 per month was discontinued by request during the year, as it was felt that

the State could take over this responsibility, thus leaving the Red Cross more funds for other purposes.

(b) *Kampong Ayer Clinic*—This Clinic is situated in the very large *kampong* on the river. The housing conditions of the people vary enormously, some of the houses being of good size and open to fresh air, while others are completely hemmed in by other houses. The majority of the women still dislike and usually refuse to attend or be admitted to Hospital. However a large amount of home visiting was carried out by the District Travelling Nurse with the aid of an Assistant Nurse, and the work of this Clinic has increased gradually. The Clinic was visited once a week by a Lady Medical Officer from the General Hospital. A new medical launch, under the control of the State Marine Department was introduced towards the end of the year to see whether transport difficulties for both staff and patients could be improved, and a final report is awaited with interest.

KUALA BELAIT AND SERIA

Each has a Health Clinic, and again a considerable amount of work was carried out at each centre, in spite of the lack of trained staff. The work is managed by four trained Midwives, and two pupil Midwives were engaged during the year. There are no Rural Midwives in the Kuala Belait District yet. Both Clinics are under the charge of One Health Sister, who spends roughly half her time at each Clinic. The numbers of attendances decreased slightly in Kuala Belait, but increased in Seria.

TRAVELLING DISPENSARIES

These are based at Brunei Town, Tutong, Temburong, and Kuala Belait, and travelling is by river generally, except in Brunei District. Most of the State was covered by these Dispensaries, and in addition the larger *kampongs* were visited by a Medical Officer, when possible. The Brunei Town Dispensary figures show a drop for the year, and it is hoped that this indicates an improved state of health among the *kampongs* visited. No rearrangement of the previous system was contemplated during the year, though it was arranged that the Dispensaries work to a fixed schedule known to *Penghulus* and *Ketuas* of the area to be visited, who informed the people there. Plenty of time was allowed in case of a breakdown, but boats and engines behaved very well

during the year, thanks to the supervision of the State Marine Department.

(C) PUBLIC HEALTH AS ADMINISTERED BY THE HEALTH DEPARTMENT

This may be divided into two main Sections corresponding to the Eastern and Western Districts of the State with the Tutong river acting roughly as the dividing line. The Health Department is under the direct control of the State Medical Officer.

EASTERN SECTOR

The main work here was carried out in Brunei District, and visits were also paid to Tutong, Muara, and Temburong Districts. The work was managed by the following staff:—

Health Inspector	1
Anti-Malarial Assistants	3
Health Mandors	5
Labourers/Oilers	52
Driver	1

(1) *Conservancy and Scavenging*—These were maintained as before and in addition, the Municipal Department of Brunei Town purchased a conservancy truck, which is capable of desludging tanks, and has proved most useful.

During the period under review, an average of 383 buckets were emptied daily and the amount of household and trade refuse removed and disposed of daily was 1,260 cubic feet. All refuse was transported to the dump located at Mile $\frac{3}{4}$ *Jalan Tutong*, where land reclamation is in progress. Oiling and earth cover were managed at the dump by three Health Department personnel. During the year an area of approximately 289 feet long x 114 feet wide was reclaimed.

(2) *Slaughter Houses*—The conditions of the existing slaughter houses remained unsatisfactory. It is anticipated that the new slaughter houses for pig and buffalo will be ready for use sometime early in 1956.

Ante-mortem inspections of all animals for slaughter were carried out daily. The total numbers of animals slaughtered during the year were as follows:—

Pig	881 head
Buffalo	324 head
Other cattle	8 head

(3) *Drainage*—The construction of concrete drains within the Municipal area progressed rapidly. A total of 59,730 yards of earth drain was maintained by the Health Department gang in the Kumbang Pasang area and the outskirts of the Municipal area.

Subsoil Drains—Drainage of a ravine adjacent to Australian Ridge was improved by the use of subsoil pipes by the department during the months of May and June.

(4) *Infectious Diseases*—The following diseases were notified:—

A Dysentery	3
Chicken Pox	5
Typhoid	1

Investigations and appropriate preventive measures were carried out in the above cases. On the instructions of the State Medical Officer, a total number of 888 persons were vaccinated against smallpox, in certain *kampongs* during the year.

(5) *Licensed Premises, Hawkers and Stalls*:—

Hawker	49
Food Shop	8
Coffee Shop	21
Bakery	9
Vegetable	19
Fish	4
Chekor	10
Coffee Stall	2
Rice Mill	1
Sago Mill	1
Pork Butcher	2
Buffalo Butcher	8

Laundry	2
Ice Cream	4
Billiards	4
Lodging House	2
Aerated Water Factory	3
Barber	4
Cold Storage	1

In connection with the issue of the above licences, a total number of 155 persons received T.A.B. inoculations, 238 persons had their stools examined and the sputum of 249 persons was examined for Tubercle Bacilli.

All licensed premises and hawkers were inspected regularly.

(6) *Water Supply*—Monthly inspections were made of the following sources of water supply:—

Tasek Reservoir	Satisfactory
Tumasek Reservoir and Fil- tration Plant	Satisfactory
Residency Road Plant	Satisfactory
K. Pasang, Australian Ridge Plant	Water was sampled and found unsatisfactory
Muara Reservoir	Satisfactory
Tutong Reservoir	Not satisfactory

A filtration plant is being installed at *Jalan Tasek*, and it is anticipated that filtered water will be available for general use sometime next year.

(7) *Housing*—The year saw the completion of 20 Second-Class Shophouses—10 located along *Jalan Tasek*, and 10 at *Muara*. Demolition of temporary shophouses, built immediately after the war, was carried out.

Ninety-four Government buildings were completed during the year.

Muara—Visits were carried out monthly by the Health Inspector. Ten Second Class Shophouses have been completed and occupied. Two Health oilers have been employed permanently in this area. Sanitary conditions are fairly satisfactory.

Tutong—Visits were carried out monthly by the Health Inspector. Sanitary conditions are fairly satisfactory. There are two Health labourers here under the supervision of the Hospital Assistant-in-charge.

(8) *Rat Eradication*—Forty-nine rats of the following types were caught and destroyed:—

Rattus rattus	28
Rattus norvegicus	19

(9) *Port Health Work*—With reference to Notification No. 249/54 dated 29.12.54, inspection of vessels from foreign ports was reduced to a small figure. The total number of Optional Bills of Health issued was nineteen.

Inspection—Inspection of imported animals was carried out as usual:—

Pig	1,487 head
Goat	219 head
Buffalo	843 head
Poultry	343 head
Cats	3 head
Dogs	2 head
Birds	6 head

The above were imported mainly from neighbouring territories.

WESTERN SECTOR

The main work was carried out in the towns of Seria and Kuala Belait, with the aid of the following staff:—

Senior Health Inspector	1
Prob. Health Inspector	1
Anti-Malaria Assistant	1
Mandors	2
Oilers	11
Labourers	8

(1) *Conservancy and Scavenging*—These were maintained as before with gradual improvement. The total volume of refuse removed daily is as follows:—

	<i>Household Refuse</i>	<i>Trade Refuse</i>
Kuala Belait	580 cu. ft.	1,680 cu. ft.
Seria	720 cu. ft.	2,168 cu. ft.

Refuse collection was carried out by a gang of 14 men, and 5 scavenging lorries. Gas incineration was employed for disposal of refuse during the first half of the year. On 9th July, 1955, controlled tipping commenced at Mile 5½ *Jalan Seria*. A daily supply of 3 truck loads of sand was delivered by the Public Works Department making a total of 584 loads of sand of which 65 loads were paid for by the Medical and Municipal Departments. An area of approximately 500 sq. yards was reclaimed.

Action was taken to enforce the use of a standard type of dust-bin in all houses within the Municipal areas.

(2) *Slaughter Houses*—There was only one slaughter house (Buffalo) located at Kuala Belait, and this was unsatisfactory. In December funds were made available for repairs and lime-washing, and the improvement was quite noticeable. No pig slaughter house as such exists in the area.

The total numbers of animals slaughtered during the year was as follows:—

Pig	3,827 head
Buffalo	954 head

(3) *Drainage*—In Kuala Belait Municipal area, concrete drains have been constructed for the new shops and their immediate surroundings. A few new concrete drains have been made in other parts of the Municipal area, but much remains to be done still.

In Seria, the position is not so good although concrete drains have been provided for the fronts of shops. However, there were no drains constructed for the back lanes which are more important, from the health point of view, and it is hoped that these will be completed early in the new year.

(4) *Infectious Diseases*—During the year there were two cases of Paratyphoid Fever notified, and also one case of Diphtheria.

(5) *Licensed Premises, Hawkers*—A total of 449 licences were issued during the year. These are as follows:—

<i>Type of Licence:</i>	<i>K. Belait</i>	<i>Seria</i>	<i>Well 22</i>
Coffee	22	25	4
Coffee and Eating	26	31	4

Market Stalls:

Fish	18	32	—
Vegetables	14	29	—
Coffee	2	—	—
Poultry	15	20	—

Hawkers:

Bread	2	1	—
Ice-Water	—	3	—
Sundry	13	15	3
Chindul	—	—	1
Cake	1	—	1
Food	7	18	1
Tawhoo	1	1	1
Vegetables	80	4	2
Fruit	17	31	2

Other Licences are as follows:

Cloth Hawker	5	4	—
Cinema	1	1	—
Billiard	1	3	—
Crackers	4	13	—
Lodging House	2	1	—
Laundry	1	—	—

All food licensees and their assistants were medically examined. Regular inspections have been made of all licensed premises and hawkers.

(6) *Water Supply*—The shortage of an adequate water supply constitutes the greatest health problem in the two Municipal

areas. The B.M.P. Co., Ltd., has an excellent piped water service, and in certain instances, this service is extended to Government houses and public places. Generally, rain water is stored and used. The construction of a piped water supply by the State is still in progress, and will be a great boon to the people in these areas.

(7) *Rat Eradication*—The following species were caught and destroyed:—

Rattus rattus	510 head
Rattus norvegicus	29 head

Two rat-catchers were employed, one in Kuala Belait and one in Seria.

(8) *Port Health Work*—

No. of foreign incoming vessels granted pratique	54
No. of Bills of Health issued	8
No. of Health Certificate issued	12

Inspection of imported animals was carried out as usual:—

Pig	6,009 head
Buffalo	290 head
Goat	64 head

Other State Wide Services of the Medical Department:

(1) *State Medical Store*—The year was notable for the large amount of special equipment ordered for the Department. By the end of the year, most of this had arrived and varied from electrical incinerators, and electrical washing equipment for vehicles, to the latest medical and surgical equipment, and up-to-date reference books on a variety of medical subjects. The additions have proved extremely useful. Stores and drugs were dispatched to various parts of the State as and when necessary.

(2) *School Feeding Scheme*—The scheme continued to flourish, and was handed over to the State Education Officer at the end of the year. The State Medical Officer still remains the medical adviser in the scheme. In April steps were taken to change the usual routine, and it was decided that rural schools should continue as before, and be provided with meal, but urban schools would be supplied with a fortified drink only, and no

meal. This has worked well, and by the end of the year the following numbers of schools were in the scheme:—

Urban schools 12 with 4,174 children

Rural schools 32 with 1,999 children

(3) *State Malaria Eradication Campaign*—This comprises residual spraying of the internal walls of houses in the rural areas only. Two sprayings were completed during the year. The first spraying began on 10th January, 1955, and was completed on 20th April, 1955. The second spraying began on 13th June, 1955, and was completed on 15th December, 1955. The total numbers of days work were 79 days and 95 days respectively.

Two Anti-Malaria Assistants and 8 oilers, one Driver and one Landrover were engaged in the project.

The following figures indicate the work done:—

<i>First Spraying</i>	<i>Second Spraying</i>	<i>Remarks</i>	
1. No. of villages sprayed 124.	No. of villages sprayed 152	Increases	28
2. No. of houses sprayed 2,176	No. of houses sprayed 2,550	Increases	374
3. Population directly protected 14,066	Population directly protected 15,532	Increases	1,466
4. Area of operation 350 sq. miles	Area of operation 500 sq. miles	Increases	150 sq. miles

The increases for the second spraying were due to the inclusion of some Belait rural districts, which were not sprayed before. Efforts were made to reach all houses and *kampongs* in the State. There were instances, where the spraying gang had to walk along jungle paths for 3 to 4 hours before reaching a village, chiefly in the *Ulu Belait* area.

(4) *Vaccination Campaigns*—During the year a team carried out a vaccination campaign against Smallpox. This disease has not been reported in the State for very many years now, but it was felt that a preventive campaign in certain *kampongs* was merited nevertheless. A total number of 6,146 vaccinations were carried out, and the campaign covered 79 *kampongs*.

School children in Brunei District were Tuberculin tested using the Jelly Patch test, though unfortunately the negatives were

not given B.C.G. immediately. However during 1956 Jelly Patch tests will be repeated on these negatives and then B.C.G. given when indicated. What has been done already constitutes a form of Tuberculin survey which should give us some idea of the conversion-rate. Two thousand nine hundred and twelve pupils in thirteen schools were tested and there were 2,537 positive and 375 negative readings. B.C.G. continued to be given to most new-born babes in town areas.

(5) *Development Plan*—This was prepared by the State Medical Officer—Dr. E. C. Vardy, and was approved by State Council in October, 1955. Very briefly the Development Plan provides for an expansion of the facilities offered by the Medical Department in urban and rural areas. For the former there will be a new General Hospital and Polyclinic at Brunei Town, and a General Hospital and two Polyclinics for Kuala Belait and Seria. In addition there will be one Tuberculosis Hospital for the State, sited at Brunei Town. Rural areas will be provided with nine Rural Dispensaries, and five additional Ante-natal Clinics, the former being staffed by a trained Hospital Assistant and Midwife, and the latter under the charge of a Midwife only. Along with the above, there will be various preventive campaigns undertaken against Helminthiasis, Tuberculosis, Venereal Disease, etc. The plan arranges for the eventual provision of modern medical aid in the form of advice and treatment for all people living in the State.

Conclusion:

(1) *Incidence of Disease*—As in the previous year the main diseases of importance were Tuberculosis and Helminthiasis. Both of these will remain problems for some time to come, though it is hoped that this time will be shortened considerably once the Development Plan gets under way. There was a fair amount of gastro-intestinal disease reported during the year, and it must be confessed that this probably included a certain amount of helminthic infection which was not diagnosed.

Other respiratory infections were numerous too, a large number due, no doubt, to an influenza epidemic which occurred in the State towards the end of the year. Skin conditions requiring treatment were also fairly common, and there were the usual mild outbreaks of measles and chicken pox. Venereal disease

showed a slight reduction when compared with the figures for the previous year. Finally there was a decline also in the number of reported cases of Malaria, from 2,728 in 1954 to 1,369 for the year under review, a drop which is due in no small measure to the State Malaria Eradication campaign.

(2) *Administration*—During the year the offices of the State Medical Officer and of the Health Department in Brunei Town were situated on the ground floor of the old Nurses Home. Later in the year the State Medical Officer moved into the adjoining kitchen block, which had been converted for his use. Conditions were somewhat trying for all, and it is hoped to remedy this state of affairs during 1956. The staff have continued to work hard and well, and the general atmosphere has been good.

There has been close liaison with the Medical Department of the British Malayan Petroleum Company Limited, and the Company continued to manage the Government Tuberculosis Ward situated in their Hospital at Kuala Belait, for the whole year. As before this Hospital undertook the treatment of all emergencies sent there by the Government Hospital in Kuala Belait, where facilities are limited due to shortage of staff and space. These services by the Company have been much appreciated.

During the year the following visits were paid to the Medical Department:—

Dr. W. G. Evans (D.M.S. Sarawak)	1. 3.1955
Miss M. Chalmers	27. 4.1955
Dr. J. H. Strahan (W.H.O.)	27. 4.1955
Dr. R. Dickie (D.D.M.S. Sarawak)	7. 4.1955
Dr. W. W. Yung (W.H.O.)	17. 5.1955
His Excellency the High Commissioner Sir Anthony Abell	9. 8.1955
The Secretary of State for the Colonies The Right Honourable Mr. Alan Lennox-Boyd	9. 8.1955
Dr. J. Clapham (D.M.S. North Borneo)	26.10.1955

This report is brought to a close now with a word of thanks to numerous officers outside the Medical Department who have

assisted considerably in various ways in easing the task of administration within the Department and who have contributed towards the progress shown in this report.

(c) HOUSING AND TOWN PLANNING

During 1955, 27 Government Quarters were erected in the Belait District and in the Brunei District. In addition, well over 300 private buildings were constructed in the State, despite this, there was a considerable shortage of houses in Brunei. The figures quoted above do not include 270 dwellings constructed by the British Malayan Petroleum Company for their own staff.

The rapid development in the State has made it necessary to revise ideas on town planning. An attempt is being made to obtain the services of a Town Planner and pending his arrival, no finalization of Town Plans has been made in Brunei Town area.

Brunei Town. Ten small shop houses were completed at Tasek and the old temporary Bazaar of Brunei Town was demolished. The land left by the demolition of these temporary shophouses has been alienated for commercial purposes and it is anticipated that steps will be taken during 1956 to construct five blocks of offices and some seven shops. In order to alleviate the acute housing situation, an area of some 7 acres at Tongkadeh has been laid out for Government houses and it is anticipated that before the end of 1956 three blocks of flats and 60 quarters will have been completed.

Muara. Ten shophouses are under construction and these should be ready for occupation early in 1956.

Belait. Consolidation of the zones created in the Municipal Board areas of Kuala Belait and Seria in 1954 took place in 1955, and the alienation of land in the two areas took place in accordance with this zoning. In November, the Seria Municipal Board area was extended to include the area zoned for the resettlement scheme of the squatters in the Well 22 area in the Oilfields, and to include also the area in which the new Roman Catholic Church and Mission School are situated. The proposed Old Persons' Home for the district will also be sited in this area.

The new Customs House in Kuala Belait was duly completed during the course of the year and was officially opened by His

Highness the Sultan on the 26th November, 1955. It has not yet been possible to utilise the godown space in the new building, as access to the wharf in front of the new Customs House has not yet been completed, but it is hoped that full use of the new Headquarters will take place in the early part of the New Year.

Forty-two second-class shops are under construction in the Seria Municipal Board area and completion is expected in the early part of 1956. When this has happened, the derelict old shops in Seria will be dismantled, and already the old market in Seria has been removed with the completion of the very fine new market in Seria which opened on 11th November, 1955. It is hoped to commence work on the new market in Kuala Belait in the early part of 1956.

Sites have been chosen for a new Administration Headquarters in Kuala Belait, a new Post Office, and a Town Hall, and work should start on the new Post Office (which is an urgent priority) in the very near future. Work on the other projects is limited by capacity.

Work has started on the extension and improvement of the District Office, Court House and Post Office in Seria, and should be completed during 1956. A Town Hall on a smaller scale than in Kuala Belait is also planned for Seria. A good class hotel is still non-existent in the district, but plans have been approved for what appears to be a very pleasant hotel on *Jalan McKerron* in Kuala Belait, and it is hoped that work will start in the early part of the New Year. The Public Works Department continued its extensive programme of providing concrete drains and road metalling, and a storm drain completed in Kuala Belait during the course of the year has been of great advantage in draining the area which it serves. Some urgent work in the way of concrete drains and road metalling is required in the New Year in the Seria Municipal Board area.

Plans have been completed for slaughter houses separately for pigs and for cattle both in Kuala Belait and in Seria, and it is confidently hoped to see some work take place in this connection in 1956.

The resettlement of the dwellers along the River Belait water front near the mouth of the river in Kuala Belait has commenced

during the course of the year, and will it is hoped to be completed in 1956. The dwellers have been given amenable sites in a residential area in Kuala Belait near the town centre. In Seria difficulties in the resettlement of the squatters from the Well 22 area have been encountered in reclaiming land, but timber and undergrowth have now been cleared, sandfilling will take place shortly, and actual work on construction of new houses for Phase I of the scheme should take place very soon. Phase II of the scheme which will move squatters into an area which is under tall timber is unlikely to be implemented until 1957.

New and well equipped pork markets are now in operation in both Kuala Belait and Seria. It is hoped that a cooked food market will be constructed in both Kuala Belait and Seria during 1956, and it is hoped that this will remove from the streets a large proportion of the current hawkers.

Work proceeds on the river wall along a large stretch of the water front in Kuala Belait and work is well under way in constructing the new enlarged wharf in Kuala Belait.

Disappointment has been felt in the implementation of the scheme to provide a piped water supply to Kuala Belait and Seria, but steps have now been taken to expedite the completion of the scheme, and there is little doubt that water in good quantities will be available to both Municipal areas before the end of 1956.

A scheme to provide a properly reticulated gas supply to both Municipal areas has been submitted to the State Government but owing to difficulties of providing equipment it is not likely that the scheme will be implemented at an early date.

Arrangements were completed during the course of the year to purchase electric posers from the B.M.P. Co. Ltd., and in the not too distant future the supply of electricity to both Municipal areas should be more than adequate and reasonably cheap.

Work is under way to construct the new Malay Schools in both Kuala Belait and Seria and these buildings should be ready by the middle of 1956. There has been an unfortunate delay in proceeding with the new Government English School in Seria, but it is hoped that this will be rectified in the New Year. The

new Noxious Trades Zone in Kuala Belait has taken shape and land has already been alienated in this area along its new access road for several industrial purposes.

Land was alienated in the latter part of 1955 in Seria for the construction of an Anglican Mission School.

A very extensive programme of sandfilling was carried out by the Public Works Department in both Municipal areas during the course of the year, and residents in the old Municipal areas are still able to have their private land sandfilled at a cost subsidised up to 90% by the Government. Development in new areas in the district is impossible without sandfilling to reclaim swamp land, and in the latter part of the year additional money was provided by the State Government to allow such reclamation to take place. Land applications in this area however will not be subsidised by Government in the matter of sandfilling.

The lack of hotel accommodation in Kuala Belait was aggravated on the 13th December, 1955, by the unfortunate burning down of a large portion of the accommodation of the Government Rest House in Kuala Belait. B.M.P. Co. completed a hotel in Seria for the use of its own personnel.

The flooring of the new bus station in Kuala Belait was completed during the course of the year and in the New Year a small building will be erected in the station to provide shelter for passengers and busmen. Taxis will also be parked in this station. It is hoped to proceed with work on the Seria station in 1956. New parking arrangements for private cars were implemented in Kuala Belait during the course of the year and have proved more than satisfactory. Seria presents more of a problem, but it cannot be said that parking arrangements there are unsatisfactory.

The area has continued to be served adequately with open spaces and in Kuala Belait, the main *padang* has been improved by the addition of dressing rooms for participating sports teams. Preparation of the new *padang* in Seria has commenced, and it should not be long before a useful *padang* in the Seria Municipal area is available to the public.

Assessment rates continued in the district at the same level, and several land holders who had not previously paid assessment

as they were outside the Municipal area paid assessment for the first time with the inclusion of their lots in the extended Municipal areas. The maximum rate for assessment remains at 12% of the estimated annual value of the property, but this is levied only where all Municipal services are provided, and the average assessment rate remains at approximately 6 or 7 per cent, of the annual value.

(d) SOCIAL WELFARE

The following Social Service Organizations are active in the State:—

Girl Guides

Boy Scout Association

British Red Cross Society

Community Service Council (Belait).

The Community Service Council has done very useful work co-ordinating the Social Service and Community Service activities in the oil fields. It is intended to support the Council by a generous grant and during 1956 will erect and run a home for old persons and T.B. patients whose chances of cure are remote.

The Rotary Club which had been started in 1954 unfortunately went into a state of suspense in 1955.

A State Religious Custom and Welfare Office caters for the occasional case of hardship and small pensions are paid to those who are disabled and who are in need. It is necessary, however, to point out that the Malay, Dusun, Murut and Iban social structures are such that applications for assistance are rare. Members of the family consider it their responsibility to take care of relatives who are in need and cases have occurred in which an offer of assistance has given genuine offence to those whom it has been offered. In some cases the micro-community automatically accept responsibility where aid is beyond the resources of the family. A highly organized Social Welfare Organization is therefore unlikely to be of much use at present, but the changing structure of local society may necessitate far more attention being devoted to this subject in the next decade.

(e) PENSIONS SCHEME

In the opinion of Mr. E. W. Barltrop, Labour Adviser to the Colonial Office, who visited the Pension Department in October, 1955, the State Pensions Enactment (No. 10 of 1954; approved on 23.12.54) is unique as being the first to introduce a pension scheme in a territory peopled largely with illiterates. It provided non-contributory pensions and allowances without a means test for:—

- (i) Elderly persons aged 60 years and over at the rate of \$20 a month.
- (ii) Blind persons aged 15 years and over at the same rate, with similar allowances for their adult dependants, plus \$10 a month for dependants under 15 years of age, subject to a maximum payment of \$100 per month in respect of any one blind person.
- (iii) Dependants of—
 - (a) lepers receiving treatment in an approved settlement;
 - (b) lunatics detained in any mental hospital or committed to the care of any relative or friend under the terms of the Lunacy Enactment at the rate of \$20 per month for adults, and \$10 per month for a dependant under 15: subject to a maximum payment of \$100 per month in respect of any one leper or lunatic.
- (iv) Disabled persons (not yet in operation).

All these pensions are available to all races, subject to a residence test.

The Pensions Adviser, Mr. H. A. Mck Billings, was appointed the first Controller of Pensions, and for the first year of its working the Pensions Office was placed under the aegis of the Commissioner of Development.

Surveys made in 1954 had shown the Pensions Adviser that it would be impracticable to introduce in Brunei any system of payment based on the English model that involved the production of order books or postal drafts at post offices, because of (i) the illiteracy of most of the population (ii) that fact that there were few post offices with facilities for handling the volume of cash

involved, and (iii) it would have been unreasonable to expect elderly people, possibly disabled as well, to undertake long and arduous journeys to receive their pension. At the same time, it was desired to arrange that every payment should be under control and that receipts should be obtained at all stages.

After consultation with the District Officers, it was decided to use approved headmen to distribute the money and to report changes of circumstance. Although not all of these men could read or write, local assistance could be counted upon.

No pension scheme can operate without forms and the Brunei one is no exception. They were kept as simple as possible and practical demonstrations of their use, and how to take fingerprints, were arranged at each District Office with the full co-operation of the District Officers. In actual practice the headmen have carried out their duties surprisingly well. Disabled pensioners have the money taken to their homes; in some districts the pensioners assemble at a convenient central point, and a kind of "pension parade" takes place amid the exchange of local gossip.

With the introduction of the Old Age Pension in April, 1955, with arrears back to 1st January, 1955, the pension scheme achieved popularity almost overnight. As Registration of Births did not commence until 1922, some kind of an alternative evidence of age had to be relied upon, and use was made of the rough estimates of age made when Identity Cards were issued in 1949/50, supported by statement by responsible persons. Experience showed that these estimates were often inaccurate, but they did provide a basis to work on. The existence of duplicate Registration records enabled the bulk of the application forms for this pension to be prepared in the Pension Office before the appointed day. For a few weeks there was a rush of would-be pensioners hotly disputing the ages recorded on their identity cards, where these indicated them to be less than 60 years of age, and considerable strain was put on the medical officers by the sudden need for medical examinations.

On 1st July, 1955, Pensions for the blind and their dependants, and for the dependants of lepers and of lunatics under treatment in Kuching were put into payment. One blind man

with a wife and 6 children receives the maximum pension of \$100 a month. Only one kind of pension may be awarded in respect of any one person. An elderly blind man, for example, may draw the old age pension or the blind pension, whichever is the more valuable to him, but not both. For this reason, the number of blind pensions awarded does not represent the full number of blind persons in Brunei.

The Enactment provides a right of appeal by unsuccessful claimants to the Sultan in Council. An Appeal Committee was set up and had its first meeting on 11th October, 1955. Alternative evidence of age or residence is considered; 19 appellants were successful out of the 53 who were heard in 1955.

An Advisory Committee of local residents, representative of each district and of the main races, was approved by the Sultan in Council during the year. Their duties will be to advise the Controller of Pensions on any matters arising from the working of the Pensions Enactment.

The Brunei Pension Department became a member of the International Social Security Association during the year and was represented by a small exhibit at an exhibition arranged in Mexico City in connection with the XII General Meeting of the Association in November-December, 1955.

Requests for details of the Brunei Pensions Scheme were received from the Commissioner for Labour, Malaya; the Secretary for Social Welfare, Singapore, and from the Director of the Federal Social Security Institute, Yugoslavia.

PENSIONS DEPARTMENT

PENSIONS AND ALLOWANCES AWARDED IN 1955

<i>Type of Pensions</i>	<i>(a)</i>		<i>Total</i>	<i>Number of</i>	
	<i>Jan.-Nov.</i>	<i>Dec.</i>		<i>Pensioners</i>	<i>Dependents</i>
	<i>\$</i>	<i>\$</i>	<i>\$</i>		
<i>Old Age Pensions</i>					
Brunei Town	303,960	27,500	331,460	1,370	—
Kuala Belait	89,530	8,400	97,930	410	—
Temburong	32,460	3,220	35,680	151	—
Tutong	90,860	8,500	99,360	432	—
	<u>\$516,810</u>	<u>\$47,620</u>	<u>\$564,430</u>	<u>\$2,363</u>	—

	July-Nov.	Dec.	Total	Pensioners	Number of Dependents
	\$	\$	\$		
Blind Pensions					
Brunei Town	6,480	1,560	8,040	47	38
Kuala Belait	780	200	980	6	5
Temburong	900	160	1,060	7	2
Tutong	—	280	280	2	2
	<u>\$ 8,160</u>	<u>\$ 2,200</u>	<u>\$ 10,360</u>	<u>62</u>	<u>47</u>
	July-Nov.	Dec.	Total		
	\$	\$	\$		
Lepers Allowances					
Brunei Town	—	—	—	—	—
Kuala Belait	350	70	420	—	5
Temburong	—	—	—	—	—
Tutong	250	50	300	—	3
	<u>\$ 600</u>	<u>\$ 120</u>	<u>\$ 720</u>	<u>—</u>	<u>8</u>
	July-Nov.	Dec.	Total		
	\$	\$	\$		
Lunatics Allowances					
Brunei Town	—	—	—	—	—
Kuala Belait	—	80	80	—	1
Temburong	—	—	—	—	—
Tutong	250	50	300	—	4
	<u>\$ 250</u>	<u>\$ 130</u>	<u>\$ 380</u>	<u>—</u>	<u>5</u>

Number of claimants who died during year	68
Number of pensioners who visited Mecca	6 (b)
Number of rejected claims	81
Date of first appeal session	11.10.1955
Number of appeals heard	53
Number of successful appeals	19
Number of medical examinations	678

Notes:

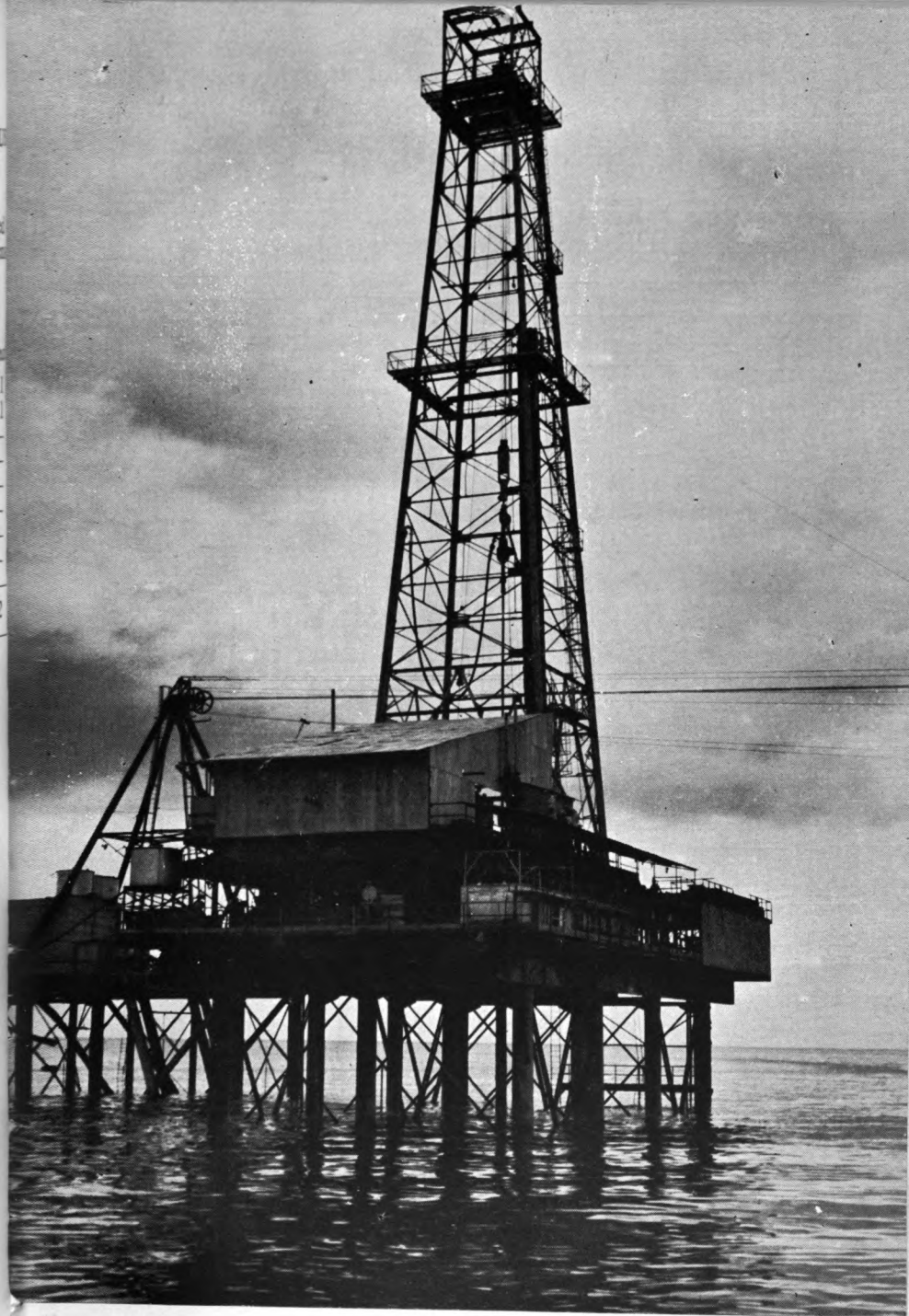
(a) As all pensions are payable monthly in arrears, pensions to which title arises in the month of December cannot be paid until the following January. The amounts shown in column (1), therefore, represent the total pensions actually paid in 1955.

(b) The Act provides that absence from the State for the purpose of a pilgrimage to Mecca does not disqualify the pensioner from receiving his pension, even if his absence exceeds 3 months.

NUMBER OF PENSIONS AWARDED TO VARIOUS CULTURAL GROUPS.

(Note:— A residence test of 30 years has to be satisfied by persons not born in Brunei before an old age pension can be awarded).

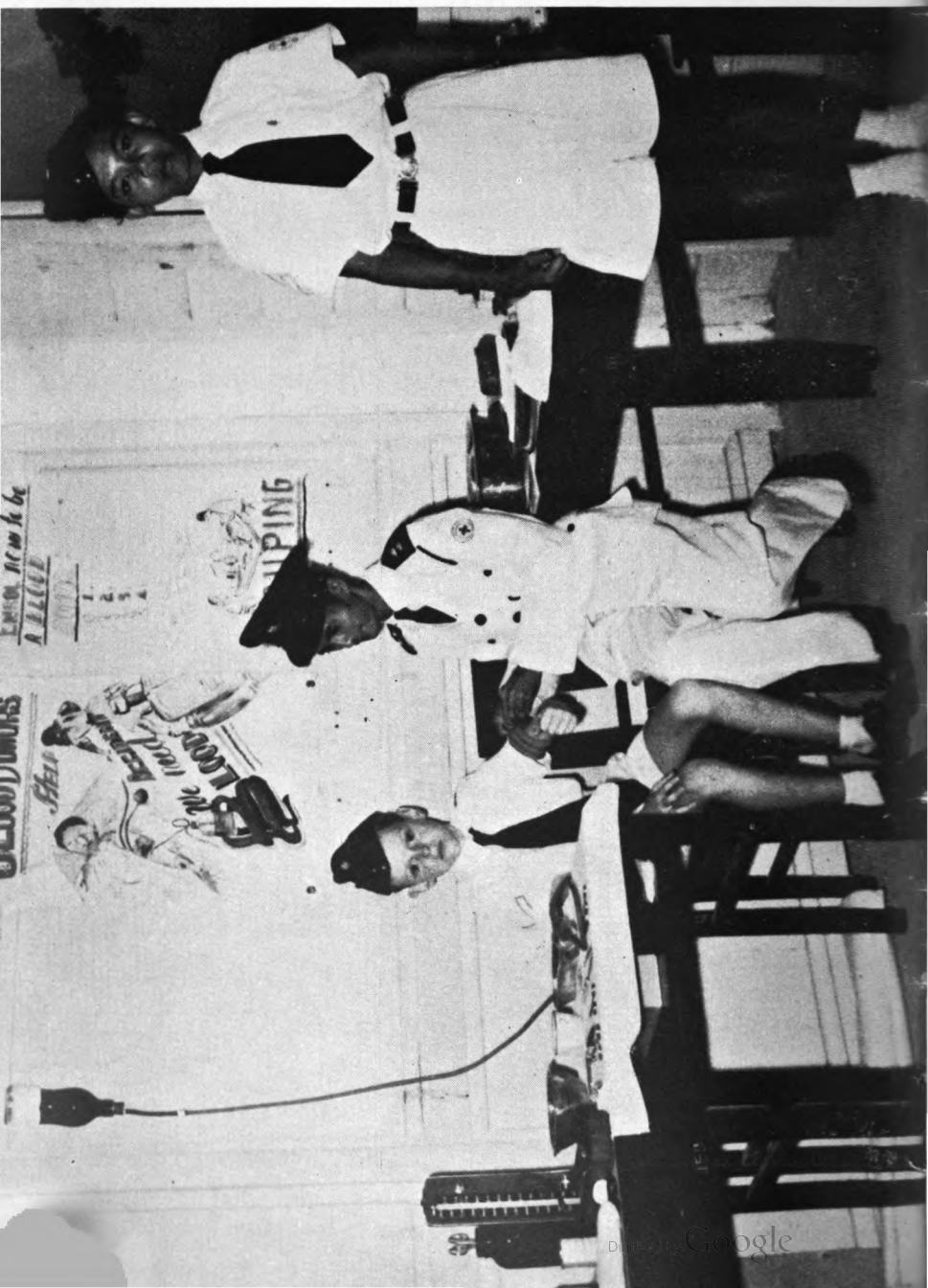
<i>Cultural Group</i>	<i>Type of Pension or Allowance</i>			
	<i>Old Age</i>	<i>Blind</i>	<i>Lepers</i>	<i>Lunatics</i>
Malay	1,955	56	—	1
Chinese	187	1	2	1
Iban	50	2	1	—
Dusun	132	1	—	—
Murut	12	2	—	—
Javanese	19	—	—	—
Indian	6	—	—	—
Siamese	1	—	—	—
	<hr/> 2,362 <hr/>	<hr/> 62 <hr/>	<hr/> 3 <hr/>	<hr/> 2 <hr/>



(by courtesy of B.M.P. Company, Serbia)

Marine drilling location off the coast at Serbia, Digitized by Google

Red Cross
demonstration
during Agricultural
Show, 1955
Blood donors,
under auspices
Red Cross.



(Information Service
photograph)

CHAPTER VIII.

LEGISLATION

THE main body of the law consists of the enactments contained in the Revised Edition of the Laws (1951) together with certain other Enactments passed before that date, which were excluded therefrom by virtue of the provisions of section 5 and the Schedule to the Revised Edition of the Laws Enactment (Cap. 1), and all enactments, other than the Revised Edition of the Laws Enactment, passed since the 1st of January, 1956.

In addition certain of the Proclamations made by the British Military Administration still retain the force of law by virtue of the provisions of the Proclamations, Transfer of Powers and Interpretation Enactment, 1946. The most important of these Proclamations is the Finance Regulations Proclamation, 1946, which together with the regulations made thereunder contain the law relating to exchange control.

The legislation has seen fit to adopt in the State certain laws from Malaya, Singapore, Sarawak and England.

The laws adopted from Malaya are—

- (a) The Evidence Ordinance, 1950;
- (b) The Bankers Books (Evidence) Ordinance, 1949;
- (c) The Contracts (Malay States) Ordinance, 1950; and
- (d) The Specific Relief (Malay States) Ordinance, 1950.

The subsidiary legislation as amended or replaced from time to time of the Colony of Singapore referred to in the Second and Third Schedules of the Air Navigation Enactment, 1954, apply in the State.

The Penal Code and Criminal Procedure Code have been adopted from the Colony of Sarawak but have been published in the Revised Edition. In addition, Brunei has adopted with cer-

tain amendments the Trade Marks Ordinance and Merchandise Marks Ordinance of Sarawak.

By the Application of Laws Enactment (Cap. 2 of the Revised Edition) the English common law, principles of equity and statutes of general application which were in force on the 25th day of April, 1951, shall, with necessary modifications, apply in cases where there is no provision either in the enacted or adopted laws of the State.

The official language of all legislation is English.

The State Council met on 6 occasions during 1955 and the following enactments were passed:—

No. 1 — The Criminal Procedure Code (Amendment) Enactment, 1955.

This Enactment made certain amendments to the Criminal Procedure Code (Cap. 7) and brought it into line with the law in force in Sarawak.

Included among the amendments are provisions—

- (a) rendering admissible voluntary statements made after caution to certain authorised police officer;
- (b) providing for the transfer of cases to a Court of higher jurisdiction when such course is considered desirable;
- (c) enabling a Magistrate to commit a convicted person to the High Court for sentence providing for a case to be referred, after determination by the High Court in its appellate capacity, to the Court of Appeal on a point of law which the Judge who heard the appeal or the Public Prosecutor considers should in the public interest be determined by that Court; and
- (d) providing for the conditional discharge of persons of unsound mind.

No. 2 — The Prize Courts (Authorization) Enactment, 1955.

This Enactment provided for the application to the State of Brunei of the Prize Courts Act, 1894, and the Prize Act, 1939, of England.

No. 3 — The Police Force (Amendment) Enactment, 1955.

The amendment to the Police Force Enactment (Cap. 50) contained in this Enactment enables police officers from Singapore or Malaya to be sent to Brunei with the consent of the Sultan in Council, and also enables police officers from Brunei to be sent to Singapore or Malaya with the consent of the Government of the receiving territory.

No. 4 — The Land Code (Amendment) Enactment, 1955.

The principal amendments to the Land Code (Cap. 40) contained in this Enactment have the effect of—

- (a) reserving to the Government the right to build a road not more than 150 links wide on payment of compensation;
- (b) making it clear that, in the absence of any provision to the contrary, land alienated by the State may only be used for agricultural purposes; and
- (c) transferring to the Sultan in Council the right to revise rents and providing that in future rents can be revised at any time.

No. 5 — The Pensions (Amendment) Enactment, 1955.

This Enactment amended the Pensions Enactment (Cap. 38) by making provision for the payment of gratuity to the legal personal representative of a pensionable officer who dies in the service, or in certain cases, after his retirement.

No. 6 — The Chinese Marriage Enactment, 1955.

This Enactment gave full legal effect to marriages contracted according to Chinese law and custom so as to allow persons of the Chinese race to marry lawfully according to their own law and customs.

No. 7 — The Minor Offences (Amendment) Enactment, 1955.

This Enactment amended the Minor Offences Enactment (Cap. 15) so as to make it possible for Offences under that Enactment to be tried by a Third Class Magistrate and not only by a Magistrate of the First or Second Class.

No. 8 — The National Registration (Amendment) Enactment, 1955.

This Enactment provided that offences under the National Registration Enactment (Cap. 15) could be tried by Second

Class Magistrates. Formerly such offences could only be tried by Magistrates of the First Class.

No. 9 — The Oil Mining (Amendment) Enactment, 1955.

This Enactment amended the Oil Mining Enactment (Cap. 43) so as to enable the Sultan in Council to grant oil exploration licences, oil prospecting licences and oil mining leases, over the area of the continental shelf contiguous to the territorial waters of Brunei which has been annexed to the State.

No. 10 — The Income Tax (Amendment) Enactment, 1955.

This Enactment amended the Income Tax Enactment (Cap. 35) so as to make it possible for the Sultan in Council to grant certain tax concessions in cases where he considers that such concessions are necessary or expedient to facilitate the development of the State, to encourage the establishment or expansion in the State of any trade or undertaking, to procure the investment of capital in any undertaking established in the State or in any other case where it is in the public interest to make such concessions.

No. 11 — The State Pensions (Amendment) Enactment, 1955.

This Enactment amended certain printing and grammatical errors occurring in the State Pensions Enactment, 1954 (No. 10 of 1954).

No. 12 — The Water Supply (Amendment) Enactment, 1955.

This Enactment made two minor amendments to the Water Supply Enactment, 1954 (No. 7 of 1954).

No. 13 — The Malayan Laws Adoption (Amendment) Enactment, 1955.

This amended the Malayan Laws Adoption Enactment (Cap. 3) making amendments by the Malayan Legislature to the adopted Enactments no longer applicable in Brunei. The opportunity has been taken to amend the Schedule by inserting the latest Malayan Ordinance relating to Evidence, Contracts and Specific Performance, by deleting the Civil Procedure Code which is no longer applicable and by adding the Bankers' Books (Evidence) Ordinance, 1949.

No. 14 — *The William Frederick Runagall (Appointment as Government Printer) Enactment, 1955.*

This Enactment provided for the appointment of Mr. Runagall as a Government Printer and for matters ancillary thereto including providing penalties for improper disclosure of confidential information.

No. 15 — *The Road Traffic (Amendment) Enactment, 1955.*

This Enactment made certain amendments to the Road Traffic Enactment, 1954 (No. 12 of 1954) and provides for the Enactment coming into force on the 1st of January, 1956.

Included among the amendments are provisions—

- (a) enabling any vehicle to be called in for examination at any time to ensure that it is in a roadworthy condition;
- (b) creating a special offence with increased penalties for reckless or dangerous driving if death results therefrom;
- (c) simplifying the procedure relating to the grant of franchises to transport undertaking; and
- (d) increasing the right of appeal against decisions made by Licensing Authorities and district Licensing Authorities.

No. 16 — *The Land Requisition (Amendment) Enactment, 1955.*

This Enactment amended the Land Acquisition Enactment (Cap. 41) by providing that compensation will be paid on the market value of land at the date when the State Council notified its intention to acquire such land and that no improvements made thereafter would be taken into consideration unless they were made with the prior approval of the Land Officer. The opportunity was also taken to make it clear that in urgent cases such as road construction it is possible to carry on vital public works without waiting for an award to be made by the Land Officer, provided that there are no buildings on the land concerned.

No. 17 — *The Oil Mining (Amendment) (No. 2) Enactment, 1955.*

This Enactment further amended the Oil Mining Enactment (Cap. 43) by providing that oil exploration licences, oil prospecting licences and oil mining leases should be grant-

ed by the Sultan in Council and not by the Resident as was the case previously. Provision was also made that the fees and royalties in the various licences and leases should apply and revoked the provision requiring that the Resident should prescribe such fees and royalties.

No. 18 — The Probate and Administration Enactment, 1955.

This Enactment which comes into force on the 1st of February, 1956, provides for matters relating to the administration of the estates of deceased persons. The Enactment provides for the appointment of a probate officer to have control over the administration of the Enactment but when dealing with the estates of deceased Muslims who were domiciled in the State he shall act on the advice of the Religious Council.

No. 19 — The Midwives Enactment, 1955.

This Enactment provided for the registration and supervision of midwives and matters ancillary thereto.

No. 20 — The Religious Council, State Custom and Kathis Courts, Enactment, 1955.

This Enactment which comes into force on the 1st of February, 1956, provides for the establishment of a Religious Council for Muslims in the State, makes provisions for the legal recognition of Malay Customs as practised in the State, provides for matters relating to the marriage and divorce of Muslims and revises the powers and duties of Kathis Courts.

No. 21 — The Moneylenders (Amendment) Enactment, 1955.

This Enactment amended the Moneylenders Enactment (Cap. 62) so as to exclude from its operation Banks who have been licensed as such by the Resident.

CHAPTER IX

JUSTICE, POLICE AND PRISON

THE Courts constituted in the State for the administration of civil and criminal law are as follows:—

The Supreme Court of Sarawak, North Borneo and Brunei, consisting of the Court of Appeal and the High Court,

Courts of Magistrates of the First Class,

Courts of Magistrates of the Second Class,

Courts of Magistrates of the Third Class,

Courts of Kathis.

This Judicial system was created by the Sarawak, North Borneo and Brunei (Courts) Order in Council, 1951, and the Courts Enactment (Cap. 6). The old Court of Appeal and the Court of the Resident have been abolished.

The Supreme Court. The Supreme Court, which has a unified jurisdiction over the three territories of Sarawak, North Borneo and Brunei, consists of the Chief Justice (styled the Chief Justice of Sarawak, North Borneo and Brunei) and as many Puisne Judges as may from time to time be appointed.

An uneven number, not being less than three, of Supreme Court Judges constitutes the Court of Appeal. In certain special circumstances two Judges can constitute the Court. It deals with appeals, criminal and civil, from the High Court.

One Supreme Court Judge constitutes the High Court. The High Court has an unlimited original jurisdiction in all civil matters other than the annulment of marriages solemnized between Christians in the United Kingdom or any British Colony and matters concerning Mohammedan marriage, religion and divorce. It has an unlimited criminal jurisdiction in the case of all offences committed in the State or on the high seas on board ships registered in the State, or committed by subjects of the

State on the high seas aboard any ship, whether registered in the State or not. It may pass any sentence authorised by law, including sentence of death. Appeals lie to the High Court, in civil and criminal cases, from the judgments of First Class Magistrates, sitting in either original or appellate jurisdiction, and from the judgments of Second Class Magistrates.

Courts of Magistrates of the First Class. The Court of a Magistrate of the First Class has original civil jurisdiction in suits involving not more than \$500 (which limit may be specially extended by Chief Justice to \$1,000), and original criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by the law does not exceed two years and the maximum fine does not exceed \$5,000. The maximum sentences which may be passed by the Court are imprisonment for twelve months and/or a fine of \$1,000. The Court has an appellate criminal and civil jurisdiction in respect of case tried by Magistrates of the Third Class.

Courts of Second Class Magistrates. The Court of a Magistrate of the Second Class has civil jurisdiction in suits involving not more than \$250 and criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by law does not exceed six months and the maximum fine does not exceed \$1,000. The maximum sentences which may be passed by the Court are imprisonment for six months and/or a fine of \$250.

Courts of Third Class Magistrates. The Court of a Magistrate of the Third Class has civil jurisdiction in suits involving not more than \$50 and criminal jurisdiction in the case of offences for which the maximum term of imprisonment provided by law does not exceed six months, and the maximum fine does not exceed \$250. The maximum sentences which may be passed by the Court are imprisonment for two months and/or a fine of \$100.

Courts of Kathis. The Court of a Kathi deals solely with questions concerning Mohammedan religion, marriage and divorce, and may impose a fine not exceeding \$50. Appeals lie from this Court to the Sultan in Religious Council.

Procedure in the Courts is regulated by—

- (a) The Courts Enactment (Cap. 6);
- (b) The Sarawak, North Borneo and Brunei (Courts) Order in Council, 1951;
- (c) The Sarawak, North Borneo and Brunei Court of Appeal Rules, 1951;
- (d) The Supreme Court of Sarawak, North Borneo and Brunei (Appeal to Privy Council) Order in Council, 1951;
- (e) The Magistrates Court (Civil Appeal) Rules, 1952;
- (f) The Magistrates Courts (Court Fees) Rules, 1952;
- (g) The Magistrates Courts (Execution Proceedings) Rules, 1954;
- (h) The High Court (Fees) Rules, 1954;
- (i) The High Court Execution Proceedings;
- (j) The High Court of Sarawak, North Borneo and Brunei (Civil Procedure) Rules; and
- (k) The Magistrates Courts (Civil Procedure) Rules, 1955.

There were three First Class Magistrates, Six Second Class Magistrates, Two Third Class Magistrates and Two Kathis functioning in the State during the year.

The following table shows the number of cases instituted and disposed of in the various courts:—

<i>District</i>	<i>Letter of Adminis- tration</i>	<i>Probate (Re- sealing)</i>	<i>Coroner's Inquest</i>	<i>Criminal Appeal</i>	<i>Civil Appeal</i>
Brunei	2	—	4	2	1
Belait	3	—	4	4	2
Seria	—	—	10	2	—
Temburong	—	—	—	—	—
Muara	—	—	—	—	—
Tutong	—	—	—	2	—
Total	5	—	18	10	3

COURT RETURN OF FIGURES (CRIMINAL & CIVIL CASES) FOR THE YEAR 1955

CRIMINAL

District	No. of Cases in High Court	No. of Cases in 1st Class Magistrate's Court	No. of Cases in 2nd Class Magistrate's Court	No. of Cases in 3rd Class Magistrate's Court	Total	No. of Persons sentenced	No. of Accused charged	No. of Cases with- drawn	No. of Cases pending	No. of Transfer
Brunei	2	16	453	37	508	451	7	34	12	4
Belait	8	96	243	97	444	414	5	22	—	3
Seria	—	—	680	25	705	576	39	87	—	3
Temburong	—	2	20	—	22	20	1	1	—	—
Muara	—	—	—	—	—	—	—	—	—	—
Tutong	—	2	47	—	49	46	2	1	—	—
	10	116	1,443	159	1,728	1,507	54	145	12	10

CIVIL

District	No. of Cases Judge of Appeal	No. of Cases in High Court	No. of Cases in 1st Class Magistrate's Court	No. of Cases in 2nd Class Magistrate's Court	No. of Cases in 3rd Class Magistrate's Court	No. of Cases missed	No. of Cases settled out of Court	Amount claimed
Brunei	1	1	5	17	—	—	—	\$ 9,382.01
Belait	—	19	41	11	2	9	—	80,961.18
Seria	—	—	—	29	—	5	—	2,808.06
Temburong	—	2	2	2	2	1	—	4,514.38
Muara	—	—	—	—	—	—	—	—
Tutong	—	—	5	6	—	1	4	3,235.85
	1	22	53	65	4	16	4	\$100,901.48

NOTE:— 1. Of the 1,728 criminal cases, 1,702 were brought against adults and 26 were brought against Juveniles.

Of the 1,702 cases brought against adults convictions were registered in 1,507, 54 resulted in acquittal, 145 were withdrawn and 12 were pending.

Of the 26 cases brought against juveniles convictions were registered in 25, 1 resulted in acquittal, nil were withdrawn and nil were pending.

2. Of the persons convicted—

- (1) 865 were punished by imprisonment and fine, the most severe sentence imposed being 6 months imprisonment and a fine of \$5,000.
- (2) 15 were punished by imprisonment, the highest sentence being 2 years.
- (3) 496 were punished by fine, the highest fine imposed being \$1,000.
- (4) 42 were discharged on probation.
- (5) 94 were cautioned and discharged.
- (6) 1 was sentenced to death.

POLICE

Command:

Mr. J. G. C. Kirby-Turner, Superintendent of Police, arrived in Brunei from North Borneo on the 19th of January, and took over command of the Force from Mr. T. F. Stone, Assistant Superintendent of Police on 26th of January. The former commanded the Force throughout the year.

Kuala Belait. Mr. T. F. Stone while acting as Chief Police Officer during the first half of January resumed duty as Officer Commanding Police District Belait on the 26th January vice Senior Inspector Pengiran Jaya who acted as Officer Commanding Police District Belait during the period under reference.

Brunei. On 8th January, 1955, Mr. B. N. Lewis, Assistant Superintendent of Police, relinquished his post as Officer Commanding Police District, Brunei, and proceeded on leave.

Chief Inspector Stephen Liew took over command of Brunei District from 13th January until the arrival of Mr. C. S. Baker, Assistant Superintendent of Police, on 21st January. Mr. Baker remained as Officer Commanding Police District, Brunei, until 22nd March when Senior Inspector Pengiran Jaya relieved him. Mr. Baker then took over command of Immigration Department on 23rd March, 1955.

Senior Inspector Pengiran Jaya left for United Kingdom on a course on the 28th June and Inspector B. M. G. Carvalho took over command of Brunei District from that date. The command was held by the latter throughout the year.

Special Branch. Mr. P. J. Rewcastle, Assistant Superintendent of Police, was in command of Special Branch up to the 23rd May when he proceeded to United Kingdom on leave on 31st May, 1955.

Mr. C. S. Baker took over command of Special Branch in addition to his substantive duties as Immigration Officer, Brunei, on 23rd May.

Immigration. Mr. C. S. Baker, Assistant Superintendent of Police, took charge of Immigration Brunei on 22nd March, 1955.

Field Force. The Force was commanded by Mr. E. W. Crunden, Assistant Superintendent of Police until 21st March, 1955. Mr. J. Tiernan, Assistant Superintendent of Police took over command of the Force on the 21st March when the former went on leave.

Chief Inspector Stephen Liew assumed responsibility for all investigation and preparation of all papers in Belait District in addition to his Special Branch work.

The Brunei Police Force Headquarters removed from Kuala Belait to Brunei Town on the 25th March, 1955.

Establishment and Strength:

There was a slight change in the Establishment during the year 1955. The following figures show the strength and establishment of the Force:—

	<i>Strength</i>	<i>Establishment</i>
Gazetted Officers	3	5
Inspectors	12	15
Sergeants Major	3	3
Sergeants	17	17
Corporals	19	26
Lance-Corporals	29	33
Police Constables	134	277
Additional Police Officers	7	—
	<hr/> 224	<hr/> 376

	<i>Deficiencies</i>	<i>Surpluses</i>
Gazetted Officers	2	—
Inspectors	3	—
Corporals	7	—
Lance-Corporals	5	—
Police Constables	143	—
Additional Police Officers	—	7
	<hr/> 160	<hr/> 7

During the year 38 recruits were enlisted, whereas 9 men resigned on completion of contract. Two men were discharged and 2 were dismissed, therefore of the 13 men lost to the Force, 38 replacements were enlisted.

Health:

The health of the Force remains satisfactory. No personnel suffered from T.B. Four hundred and fifty men reported minor ailments with a total of 577 man-days lost through sickness.

Discipline:

Minor Offences	60
Major Offences	34
	<hr/>
Total	94

Recruiting:

Thirty-eight recruits only presented themselves for enlistment during the year. It is not thought that the pay is the only reason for this state of affairs. The population is not big enough to sustain a Police Force of three hundred men.

Two Probationary Inspectors were recruited from Malaya during the year.

Training:

During the year 38 recruits were trained in the Police Training School, Kuching, and were absorbed into the Force on the completion of their training courses.

Senior Inspector Pengiran Jaya attended the A2 Course at Ryton-on-Dunsmore Police College during the year.

Transport:

The situation is very satisfactory and the Force is equipped as follows:—

Landrovers	13
Commer 5-ton trucks	2
Bedford 3-tonners	3
Bedford 15 cwt.	3
Motor-cycles	11
Fire-engines	3
Saloon Car	1

The maintenance of the transport in the Belait District is still being carried out by Borneo Motors Limited.

Brunei District transport is still maintained by the Public Works Department.

Housing and Building:

No new building was built during the year.

The Immigration Department moved in to the Belait Police District Headquarters building during the year.

Signals:

The six "19" H.F. sets were still in use to great advantage.

Traffic:

There was a slight decrease in traffic accidents. However, there were 4 fatal accidents during the year. Many of the Police

Traffic Squad now have their own motor-cycles and this system is proving of great value in the control of traffic.

Crime:

There was one murder committed during the year which resulted in an initial sentence of death, later commuted to fifteen years. The only other crime of importance during the year was the burglary of approximately \$100,000 worth of jewellery. Two persons were arrested and convicted in this connection with the recovery of over 90% of the stolen property.

Aliens' Registration and Immigration:

During the year 46,428 persons entered the State whilst 42,184 left the State. The majority of the movements were by permanent residents leaving the State for short visit and returning thereafter.

During the year 1,968 aliens were registered. The number of other documents issued by the Immigration and Aliens Registration Departments are as shown below:—

(1) Full visas and transit visas	1,768
(2) Certificates of Identity (British subjects and subjects of His Highness the Sultan)	909
(3) Emergency Certificates	1,095
(4) Police 64's for non-British subjects	545
(5) Special Passes	1,516
(6) Aliens Certificates of Identity	238

Figures concerning persons travelling to and from China during the year are as follows:—

	<i>To</i>	<i>From</i>
Total	67	—
Total number in age group 16-30	20	—
Total number of family groups	3	—
Number of re-entry permits granted	—	—

C.I.D. and Special Branch:

This remains the same throughout the year.

Welfare:

The position remains satisfactory.

There has been an increased interest shown in sport.

Societies:

Thirteen societies were registered during the year, all of which were organised for welfare and cultural purposes.

General:

The year has seen continued improvement in the organisation of the Force. Traffic Squads were formed in Seria, Kuala Belait and Brunei Town. These squads are working well and have, with increased road patrols, had a marked effect upon traffic generally.

The establishment of the Oilfields Security Force was increased to 225. Uniforms were provided during the year. The organisation and training were improved and this unit is now a very valuable asset in the Oilfields area.

Plans were completed for a new Station and District Headquarters at Panaga and for Police Stations at Labi and Sengkuring. Work on these stations is due to commence early next year.

Provision has also been made for 12 Radio Patrol Cars to operate in Seria and Kuala Belait early next year.

Arrangements were finalised for a contingent of seconded Malayan Police to reinforce the Brunei Police. The contingent is due to arrive in Brunei early next year.

Police Headquarters was moved from Kuala Belait to Brunei Town in March. All paysheets are now prepared at Police Headquarters.

The Force has once again gone through a year over a hundred understrength. The hard work and esprit de corps of all ranks deserves very special mention.

PRISONS

The number of Prisoners detained during the year at the main Jerudong Prison has at no time been large. The Kuala Belait Prison is not a suitable place for the detention of prisoners and it is intended that all prisoners be incarcerated in the Jerudong Prison early in the new year.

Prisoners are employed extra-murally whenever possible, but the shortage of land in the vicinity of the prison limits such employment to a certain extent; furthermore the upkeep of the Prison compound and buildings makes it necessary for the majority of prisoners to be detailed for fatigue duties within the compound.

Youthful offenders are normally transferred to the Boys Home in Sarawak where facilities for rehabilitation and training are available.

Prison statistics for 1955 are as follows:—

1. *Prison Population by Race:*

Malay	8
Indian	2
Chinese	30
Iban	3
	<hr/>
	43
	<hr/>

2. *Classification by age groups:*

Under 20 years	5
20 — 25 years	6
26 — 30 years	8
31 — 40 years	11
41 — 50 years	9
Over 50 years	4
	<hr/>
	43
	<hr/>

3. *Classification by sentences:*

Under 1 month	32
1 — 3 months	5
4 — 6 months	1
7 — 12 months	2
Over 12 months	3
	<hr/>
	43
	<hr/>

CHAPTER X

PUBLIC WORKS AND UTILITIES

PUBLIC WORKS

General:

THE total expenditure of the Public Works Department for the year 1955 was \$19,521,900 which shows an increase of approximately 12% over the amount spent in 1954. Of this total, \$9,330,200 was expended from Part I of the Estimates, as compared with the actual expenditure of \$12,839,345 in 1954. The remaining \$10,191,700 was expended under Part II of the Estimates for which a total of \$18,126,500 under the control of the State Engineer, was approved for 1955, for works to be undertaken under the Development Plan, over the years 1954-1958. The expenditure represents 56.2% of the approved expenditure.

Staff:

There was a considerable improvement in the staff position during 1955. The year saw the formation of a Road Section and negotiations are now in hand for the appointment of an Architect and Water Engineer which will improve the organisation still further.

Throughout 1955 Mr. G. T. Myles, B.A., B.A.I. (Dublin), A.M.I.C.E., an Officer on secondment from the Sarawak Establishment continued to act as State Engineer, Brunei. Mr. P. G. Lindsay, Dip. C.E. (Sydney) filled the position of Assistant State Engineer, Kuala Belait and Mr. D. J. Causby, B.E. (Adelaide), an Officer on secondment, from the Sarawak Establishment acted as Assistant State Engineer, Brunei. When Mr. Lindsay left on leave in November, Mr. Causby took over the position of Assistant State Engineer, Kuala Belait, and position was filled by Mr. Wong Chow Kee, a newly appointed Assistant Engineer. Mr. W. C. Wilkinson remained in charge of the Heavy Equipment Section until he left on long leave in November when he was succeeded by Mr. W. Crosby-Emery, another new appointee.

During the year, the Workshop staff was reorganised with the arrival of the Mechanical Engineer, Mr. J. A. Rolph. Mr. J. Allison Wood was transferred to Kuala Belait as Workshop Supervisor, Mr. A. P. Jack continued as Workshop Supervisor in Brunei and Mr. W. H. Doughty acted as Officer-in-Charge of the heavy equipment in the P.W.D. Workshops.

In April the Road Section of P.W.D. was formed with Mr. G. J. Cliff as Chief Roads Engineer assisted by Road Engineers I. J. M. Kelly, J. D. S. Brookes, and C. Powter. Three experienced road foremen were recruited from Australia and with the appointment of several overseers, clerks and other personnel, the new Section took over the planning and construction of all roads and associated projects in the State.

This expansion in trained staff has enabled the Public Works Department to carry out a very heavy works programme in 1955, and with further expansion in 1956, even faster progress can be expected.

Labour:

The labour position continued to improve considerably during 1955 and by the end of the year there was no shortage of unskilled labour. Local skilled tradesmen were still in short supply and a number have had to be imported from Hong Kong. A large number of apprentices are being trained in the P.W.D. Workshops and within a few years these should be able to take over the work now being performed by imported tradesmen. Apprenticeships have proved very popular, and there is now a long list of applicants waiting for vacancies.

Contractors:

A considerable number of new contractors have been registered in the State during the year and there are now 85 registered contractors appearing on the Department's books. These are made up as follows:—

- 22 — Class "A"
- 22 — Class "B"
- 34 — Class "C"
- 7 — Miscellaneous — Electrical
Stone
Plumbing
Transport

The Classification is made up thus:—

Class "A" — can tender for an unlimited amount.

Class "B" — can tender up to \$150,000.

Class "C" — can tender up to \$ 25,000.

Due to the large number of contractors registered in the State, the tender prices have been more competitive, and costs have fallen favourably.

During the year 48 contracts were let out in Brunei Town, amounting to \$6,032,637. The largest single contract given out by tender was for the construction of 40 blocks of houses and flats at Tongkadeh valued at \$1,484,000.

At Kuala Belait the position has also improved considerably, and the greater competition has resulted in the improvement in the standard of workmanship. This has also been helped by the importation of quite large numbers of skilled tradesmen.

Materials:

Stone: Practically all the stone used by the P.W.D. in the area extending from Muara to Tutong, is worked from the sandstone gravel deposit on the sea-shore at Berakas.

During the year a new area was opened up, approximately $\frac{1}{2}$ mile west of the existing quarry. Removal of the overburden was started in this new area, and an access road is being cut for transport to the stone face. The gravel seam approximately follows the course of a small stream, and the visible stone faces are encouraging enough to warrant the development of the area as a potential quarry. It is estimated that stone will be available from this area by the beginning of 1956.

The arrival of two "22 R.B. Excavators" in June, did much to increase the development of, and production from, Berakas. A "D7 Hystaway" with clamshell has started recovering stone from below sea-level—a hitherto untapped source.

The production of good stone from the Berakas Quarry is daily becoming more difficult owing to overburden difficulties. In spite of these obstacles the quarry produced an annual total of 90,883 cubic yards of sand/stone mixture, and 4,012 cubic

yards of hand picked crushing stone. The stone crusher at the Quarry produced an average monthly output of 775 cubic yards of crushed aggregate with a maximum output of 1,200 cubic yards in November. In December, the Commissioner of Development Mr. E. R. Bevington, the State Engineer Mr. G. T. Myles, and the Chief Roads Engineer Mr. G. J. Cliff went to Batu Gading in Ulu Baram, Sarawak, to investigate limestone deposits in that area. The purpose of the visit was to investigate the suitability of this limestone for road building, the manufacture of cement, and other purposes.

Samples were brought back to Brunei and these are now being tested.

In the Kuala Belait and Seria area great difficulty was experienced during the year in maintaining adequate supplies of suitable stone. This was mainly brought about by contractors failing to deliver as promised. Towards the end of the year more shipments were received, and it was possible to build up a stockpile of various sizes of aggregate. The poor supplies of stone considerably slowed down the construction of roads in the area.

Supply of uncrushed stone from Brunei continued but the quality was poor, and the stone only suitable for road base course. The British Malayan Petroleum Company maintained a steady supply of Temburong stone of quite good quality, but unfortunately in inadequate quantity. This stone is 10% of their production at Biang on the Temburong River, and is supplied to the Government by mutual agreement.

Prices of uncrushed local stone varied from \$23 to \$27 per ton, a slight upper trend, and imported crushed stone, at prices between \$29 and \$33 per ton, showed a slight downward trend. After crushing, the local stone costs almost as much as imported crushed stone, and it is of far lower quality.

Stone supplied to P.W.D. Kuala Belait during 1955 is as follows:—

Local uncrushed	10,878 tons
Imported crushed	4,100 tons
Imported blockstone	231 tons

Sand: There are ample supplies of sand in the State, but the majority of it is much too fine for good quality concrete work. However, mixing one part of stone dust from the crushes with six parts of sand greatly improves the quality.

Timber: Adequate supplies of soft-wood and hard-wood were readily available, but work was often delayed waiting for the timber to season properly. The importation of *belian* roofing shingles was reduced because various types of asbestos roofing have been found to be more satisfactory, and are comparable in price. At Kuala Belait, *belian* logs for the fender piles of the new wharf were imported, but the quality was poor and the lengths restricted by shipping difficulties.

Land Reclamation:

In both Brunei and Kuala Belait there are many low lying areas which require filling before they are suitable as building sites. During 1955 a considerable amount of filling was done on such sites.

Brunei: Clay fill from Tasek Hill was supplied for various projects, the more important of which were P.W.D. Compound, Wireless Compound, the new Mosque, Riverside wall and Power Station. Some of these schemes necessitated the carting of up to 32,000 cubic yards of fill.

Other areas where considerable filling was carried out was at the Chinese School where the old *Sungei* was filled in and the general level of the area was raised by 2 to 3 feet, the Brunei Town *Padang* and the Tongkadeh Housing Area.

Kuala Belait: The whole of the town areas of both Kuala Belait and Seria are low lying, and in order to raise the general level of these areas to give better drainage and healthier conditions, \$2,000,000 was approved in 1954 for sand filling of approximately 400 acres. Progress with this filling was slow during 1954, but in 1955, following the complete mechanisation of loading sand on the beach, and with the purchase of a fleet of vehicles for this work, the rate of filling was greatly increased. At the end of 1955 the filling of these areas was approximately 30% complete.

During 1955 it became apparent that further filling was required outside of the old Municipal Board boundaries, and a further \$500,000 was approved.

Government assisted filling whereby the owner pays 10% of the cost of filling was continued, and private lots were completed. The opening up of new areas resulting from the building of new sand-filled roads has caused a flood of applications for sand filling from land owners, and where filling of these lots has been carried out, many new houses have been built. All Government Quarters built during the year have been on newly sand filled areas.

In the outlying areas of the Belait District, work was commenced on a school *padang* at Kuala Balai, and preparations made for another at Bukit Sawat. At Kuala Balai filling is being brought from a sand bank about 6 miles upstream in order to raise the level above the swampy surrounding country. At Bukit Sawat, portion of a neighbouring hill side was resumed by the Government, and fill for the *padang* will be pushed down by bulldozers.

P.W.D. Workshops:

This organisation is responsible for the operation of workshops in both Brunei Town and Kuala Belait, and for the maintenance and repair of all Government vehicles, plant, and machinery.

Brunei Town: During the year the Workshops were gradually moved from the centre of the town, to the new site at Tasek, and they were officially opened by His Highness the Sultan, on 1st October. The workshops are designed on modern lines, and are equipped to maintain, repair, and service some 150 Trucks, 30 Bulldozers, 20 Land Rovers, 7 Graders, 10 Stone Crushers, 18 Road Rollers and other miscellaneous equipment.

The main Repair Shop is 210 ft. x 68 ft., with room for extension, and three bays are shortly to be added. Other shops include a Machine Shop, Store 97 ft. x 41 ft., and two other buildings which contain an excellent Service Station and other small shops usually required for repair work. The Office Block is 81 ft. x 20 ft., and the Workshops and Offices employ just over 200 men.

Adjacent to the Workshops, a large covered Car Park has been built, and has P.O.L. Offices, Petrol and Dieselene Electric Pumps.

Owing to the increasing number of vehicles to be maintained, plans have already been made to increase the size of the Machine Shop so that parts could be manufactured and rebuilt.

Kuala Belait: In 1954, the Workshops at Kuala Belait was a small building near the present P.W.D. Office. During early 1955, a new site covering roughly 12 acres was planned. Most of the buildings have now been erected, and work is already being done in the new shops. The main workshop is 160 ft. x 50 ft., and there is also a Store of the same size, which carries transport and heavy equipment spares.

The Machine Shop is rather small, but provision has been made to extend the building and purchase extra equipment early in 1956.

A Service Station is being constructed, and will have two 5 ton, and one 3 ton hoist installed. Adjacent to the Service Station is a twin wash ramp, where vehicles can be washed under high pressure.

The Workshops are responsible for maintaining some 50 Trucks and Tractors, 3 Graders, 14 Bulldozers, 11 Land Rovers, 3 Road Rollers and other miscellaneous equipment, all materials being ordered from the main Store at Brunei Town.

The Staff at present consists of 10 Fitters, 25 Apprentices and 7 other Tradesmen. These are controlled by a European Officer-in-Charge Workshops, 1 Asian Transport Overseer, and 3 Shop Supervisors.

Seria: The Workshops of the British Malayan Petroleum Company have been developed since the end of the war at a capital expenditure of approximately \$3½ million, and to-day covers an area of about 25 acres.

The term "Workshops" embraces a number of self-contained units, including the following:—

- (1) Mechanical Equipment Repair Shop
- (2) Machine Shop
- (3) Welding Shop
- (4) Automotive Repair Shops

- (5) Instrument Shop
- (6) Carpenter and Paint Shop
- (7) Salvage Yard
- (8) Refrigeration Shop
- (9) Equipment Records
- (10) Administration and Accounts.

The Supervisory Staff consists of 15 Senior Staff, and 65 Regional Staff, controlling a labour force of 720 men, 80% of whom are either skilled artisans or apprentices and trainees.

The equipment contained in the Shops includes a large crank-shaft grinding machine, submerged arc-welding equipment, modern transformer, welding and Oxy-Acetylene propling machines.

Modern power-hammers meet the requirements of the Blacksmith's Shop, whilst both the Mechanical Equipment Repair Shops, and the Instrument Shop contain air-conditioned rooms for fuel pump and delicate instrument repairs respectively.

Modern dynamometers in the Mechanical Repair Shop provide a fitting conclusion to the joint efforts of skilled labour-Supervision, and the latest in testing and repair equipment. The Carpenter's Shop is similarly equipped to handle anything from packaging to cabinet making.

The volume of work put through the Shops Complex in 1954 about 6½ million dollars, and 1955 figures so far indicate a similar value for this year.

P.W.D. Stores:

Workshop Stores: Although standardization is insisted upon whenever possible, the stores holding of spares is very considerable.

The Stores commenced operations at the beginning of 1955 with a total stock of \$509,706 on hand. These items were actually in three places, but were collected and brought to Tasek Store. The new Storekeeper for Tasek had the job of starting a store system, providing suitable bins, stock cards etc. Up to October 1955, there has been a considerable amount of receipts, totalling \$1,085,770, and the issues for the same period were valued at \$484,994.

The Stores have a staff of one Storekeeper, and nine other personnel made up as follows:—

- 2 men on receipts
- 2 men on issues
- 2 men posting invoices and adjusting stock cards.
- 3 men on general duties.

Plans have already been made to increase the size of the Store.

Unallocated Stores: From the 1st January the main P.W.D. Unallocated Stores were combined with the State Supplies Department, under a Controller of Government Stores.

It was not until April that the removal of these Stores from the wharf area to Tasek Compound was completed and same time elapsed before a suitable staff could be obtained. In July a detailed physical check of all these stores was completed, with very satisfactory results.

During the year complete Vocabularies of eight separate Government Stores have been made, comprising 17 separate books, covering 14,782 items. These have been kept up to date with alterations and additions.

During the year the total volume passing through the State Stores and Supplies Department is approximately—

Purchases	\$4,529,724
Sales	4,283,308
Total	<u>\$8,813,032</u>

Buildings:

With the assistance of architects who have been given the charge of the larger building projects in the State, good progress was made in Buildings in 1955.

Brunei: Government buildings completed in 1955 include the High Commissioner's Lodge at Muara, the Annexe to the *Istana*, and the Sir Omar Ali Saifuddin College building (1st phase). 1955 also saw the completion and occupation of the P.W.D. Compound. With all the Stores, Workshops, and garages

conveniently sited within the area, work will be carried out more quickly and efficiently.

Contracts have been signed for the construction of 21 Rural Schools and Quarters, and work on these are in varying stages of construction. Other contracts let out under the School's programme are the Sultan Mohamed Jemalul Alam Girls School and the Domestic Service Blocks.

During 1955, all Government buildings in the State were maintained and kept in good repair. Repainting of quarters was continued using a more colourful variety of colours. It is hoped that all quarters and buildings would look brighter in the near future with the abolition of the standard external white and green. Improvements to some old type quarters were made and 1956 should see many brighter and more modern quarters.

Generally, the construction of all buildings in the State was carried out in a satisfactory manner, though some of the construction of the Rural Schools and Quarters was delayed by site preparation. Quite a number of these sites are either in swamp areas, or on hilly ground, necessitating either filling or cutting, or both.

The site preparation of the housing areas for Junior Service Quarters behind the *Sungei Tongkadeh* was completed towards the end of the year, and the contract for building 40 blocks of various types of quarters was signed. Half of these are expected to be completed in 1956, and these will help to ease the housing situation considerably.

Keen competition between contractors was maintained in 1955, resulting in lower building costs.

For details of buildings completed in the Brunei, Muara, Tutong and Temburong Districts see Appendix "M".

Kuala Belait: Once again a heavy building programme was undertaken, but it was impossible to complete all of the works requested, because of shortage of staff. The shortage of quarters was practically overcome following the completion this year of 32 Junior Service Quarters, 20 Barrack Quarters, and 4 Senior Service Quarters. In addition to these, a construction camp com-

prising of 1 temporary Senior Service Quarters, and 10 temporary Barrack Quarters was built at *Sungei Liang* for the road staff.

Work on the Public Works Department compound proceeded, and by the end of the year, the Workshop, Machine Shop, Main Store, and Furniture Store were completed and occupied, and construction of the Service Station, Blacksmith and Paint Shops had started.

Sino-Malayan Engineers completed the new Customs Building at Kuala Belait, and the Customs Department moved in towards the end of the year. The design and supervision of this building was done by Messrs. Booty and Edwards, Architects.

For details of buildings completed during the year, and buildings under construction at the end of the year in the Kuala Belait-Seria area, see Appendix "N".

Works under the Supervision of Messrs. Booty & Edwards, Architects:

1. *New Mosque at Brunei.* The construction of the super-structure of the new Mosque is now proceeding satisfactorily after a long delay due to the difficulties encountered with pile-driving and foundation work. To date, the main structure is complete up to the first gallery level. The formwork for the main arches is now being constructed, and reinforcing steel is progressively being placed.

The structure of the main tower has reached the level of the 3rd Floor, and formwork is being constructed towards the 4th Floor level. The basement to the Pool is now structurally complete, and work is proceeding above the floor level.

2. *Customs' House, Brunei Town.* The progress on this job is steadily improving. Foundation work is now about three-fourths complete and formwork for the floor slab to one half of the building is being made.

3. *Government English School for Boys, Phase I, Brunei Town.* Work on this contract has not been satisfactory, but it is hoped that the classroom block will be ready for occupation by the commencement of the new school term on the 3rd January, 1956.

Work on the dormitory and kitchen block is approaching the finishing stages, and pending the arrival of certain materials, no further delay is anticipated.

4. *Government English School for Boys, Extension to Phase I, Brunei Town.* Piling work is now in progress and is nearing completion.

5. *45 Municipal Flats at Tasek.* All work on this block of flats has been stopped due to the necessity to underpin the two ends of the building. When this work has been completed fresh tenders will be called for the completion and rehabilitation of the building and appurtenant works.

SURVEY DEPARTMENT

During 1955 the staff of the Survey Department has been strengthened by the recruitment of one Assistant Surveyor, one Theodolite Surveyor, one Computer, two Computer/Draughtsmen, one Draughtsman and 7 Tracers. There were also 5 resignations from Drawing Office Staff and 2 resignations from the Field Staff. This recruitment has considerably increased the output potential of the department, but as only the Assistant Surveyor did not require training, the actual increase of output is not related to the increase of the staff. Also 3 of the Tracers were recruited in December 1955, and have done very little productive work. Even this recruitment does not bring the department up to the approved establishment, there still being vacancies for 2 Assistant Surveyors, 3 Theodolite Surveyors, 2 Computers, 5 Draughtsmen, 10 Demarcators, 1 Plan Custodian and 2 Lucigraph Operators.

The aim of the department is to produce accurate and reliable 4 Chain Cadastral sheets covering all alienated land. To achieve this object, the field staff of the department have been carrying out revision surveys of all land alienated prior to the setting up of the Survey Department in 1952, and the surveys of new Land Applications, received from various Land Offices. To enable these surveys to be accurately positioned and plotted, a network of theodolite traverses is being undertaken. In 1955, prismatic compass surveys were made of 2,897 lots, and 12,364 chains (154.55 miles) of theodolite traverses were run. This brings the total since the Department was formed, to 10,092 lots surveyed

by prismatic compass, and 19,391 chains (242.4 miles) of theodolite traverses completed.

The plotting and fair drawing of the cadastral sheets has however been held up by the lack of computers to compute theodolite controls already run. This shortage of computers should however be remedied in 1956, as the two Computer/Draughtsmen having been trained in draughting work, will be undergoing training as computers in 1956, and will then be employed full time on computations.

At the beginning of 1955 there were 2,331 new applications awaiting survey, besides all the revision surveys that were necessary. It was realised that if new applications for land were received in 1955 in the numbers they had been in 1954, it would be impossible for the Survey Department to catch up on the backlog of work. It was felt also that the majority of the applications for land were from speculators, and not from genuine farmers. It was therefore decided by State Council to stop all applications for land, unless the land was put to a use of economic benefit to the State. It was reported in 1954 that an effort had been made to collect all outstanding land applications from District Land Offices, even so in 1955, 3,274 applications for land were received from various Land Offices. Some of these applications were first made in 1940, and had only now been passed for survey. With this large number of land applications held in District Land Offices, it is very difficult to arrange survey programmes, so that one area at a time is completed and not as must happen now, an area coming under survey two or three times. Even in the last month of 1955 outstanding applications were being received from Land Offices, but it is hoped that most of them have now reached the Survey Department.

In order that the issue of titles for new Land Applications are not held up, the department continues to chart surveys of new Land Applications on existing plans, calculate the areas from the draughtsmen's plot, and prepare the sketch on the form; "Extract from the District Register" which is passed to the Land Office for their necessary action. In the year under review, 806 new Land Applications were dealt with in this manner, bringing the total since the department was formed to 1,477. This figure shows what a big improvement has been made in the output of the Drawing Office in 1955.

Besides this work the Drawing Office has prepared 86 Standard 4 Chain sheets on tracing cloth, which will be known as temporary 4 Chain sheets, on to which have been traced after fixing to any existing controls, all revision surveys, and surveys of new alienations. The primary object of these temporary sheets was to obtain as complete a picture as possible of all the alienated lands, so that adequate theodolite controls could be run to the best advantage. It had been found more or less impossible to join up the existing land office plans for this purpose, as they were on no common base, however these sheets have not only proved their value, as a base for planning theodolite controls, but are now used by the Land Office for recording new applications. Also copies have been supplied to the P.W.D. for use on road work, and to the British Malayan Petroleum Co. Ltd., for pipe line and site location.

A fair drawing for reproduction was also completed of a Map of Brunei on the scale of 1/500,000, compiled from the 1/500,000 Map of Sarawak and Brunei, for the 1955 Annual Report. A Composite Map of Brunei Town on the scale of 4 Chains to an inch was also drawn, and many copies of this map have been distributed to Government Officers and the General Public.

In September the State Surveyor was able to arrange for the R.A.F. to undertake low level photography over Brunei Town and environs, the first prints of this photography being made available in a little over a fortnight. From these photographs has been compiled by simple lay-down of photographs a Map of Brunei Town on the approximate scale of 1/5,000, copies of which will be supplied to Government Officers. When extra prints of these photographs are received, an uncontrolled mosaic will be prepared, and reproductions of this mosaic made available to Government Departments.

In July of this year the Department received and installed a photostat machine, which has enabled the department to supply many copies of plans very quickly and at short notice. This work would have previously taken many hours of skilled draughtsmen's time preparing tracings, when they could have been employed on original work.

The only setback the Department has suffered, is the loss of concrete marks, marking the traverse stations of 1st Class Theodolite Traverses along roads. The traverses were run along the routes of roads, before the State had finalised the road improvement programme, with the result that traverse marks, which were emplaced well off the trace of the old road, have disappeared when road improvements commenced. Therefore in 1956 it will be necessary to resurvey a considerable amount of 1st class traverse, in order to have connections for the 2nd class control traverses.

WATER SUPPLY

Brunei Town:

During the year the supply from Tasek still caters for practically the whole of Brunei Town. However, with the completion of the filter house and storage tank in the Tasek area, it will soon be possible to supply the town with chlorinated and filtered water in conformity with present day requirements. At the end of November, tests were carried out to the four Jewell Filters, and results were favourable, except for some minor adjustments. This plant will be in full operation by the end of December.

A new Reinforced concrete Water Tank in Kumbang Pasang providing supply to the quarters in that area, and the Berakas Airfield, was completed in August. This tank, with a capacity of 180,000 gallons, will be supplied direct by gravity from the main storage tank. Reticulation mains to the area are now being laid, and the scheme will be operating by mid-February, 1956.

At mile 2, Tutong Road, a new R.C. Tank was erected for supplying water to the new Istana staff quarters, and the wireless stations. A high level steel Water Tank was also erected at mile 3, Tutong Road in order to provide water for the Municipal Slaughterhouses.

Several improvements to minor supplies were made during the year. A temporary earth dam was constructed in Dato Gandi to supply the school and quarters there, and a scheme is being prepared to erect a small concrete dam across the *Sungei Menjalin* to provide a new supply to *Kampung Ayer*.

Blind Pensioner
receiving his
pension from
Katua (Headma

(Information Serv
photograph)



New Customs
House.
Kuala Belait.



(by Courtesy of
Design Press)

The following figures show the increase in the average daily consumption in Burnei Town during the past few years:—

1953	288,000 gals.
1954	355,600 gals.
1955	428,035 gals.

To improve the present supplies many new mains were laid, and some of these improvements involved the re-laying of existing mains. The following lengths of pipe were laid during 1955:—

10" dia	1,865 feet.
8" dia	3,321 feet.
6" dia	Nil
4" dia	1,514 feet.
3" dia	1,825 feet.
2" dia	8,164 feet.
1½" dia	5,857 feet.
1¼" dia	63 feet.
1" dia	3,337 feet.

During the year, 30 new connections were made to Government quarters and 33 to private houses. Five new standpipes were erected for the use of the public. Contractors were supplied and charged for water used for constructional purposes, and 17 such temporary supplies were made during the year.

Kuala Belait:

It was hoped that a new water supply scheme for both Kuala Belait and Seria would be in operation during 1955. All of the pumps and storage tanks were completed, but unexpected difficulties were encountered in laying the mains through swampy country.

This supply, when completed, will supply chlorinated filtered water from the British Malayan Petroleum Company supply at Badas, to a low level tank at Seria, from where the water is pumped to high level tanks in Seria and Kuala Belait, and thence by gravity supply to the consumers.

The existing supply continued to be unsatisfactory in both quantity and quality and very few additional connections to consumers were made during 1955.

The following extensions to the supply were made:—

<i>Kuala Belait</i>		<i>Seria</i>	
$\frac{1}{2}$ " dia.	95 lengths	$\frac{1}{2}$ " dia.	59 lengths
$\frac{3}{4}$ " dia.	21 lengths	1 " dia.	26 lengths
1 " dia.	82 lengths	$1\frac{1}{2}$ " dia.	10 lengths
$1\frac{1}{2}$ " dia.	44 lengths	2 " dia.	73 lengths
2 " dia.	74 lengths		

It was necessary to replace the following lengths of pipe because of leaks and damage:—

<i>Kuala Belait</i>		<i>Seria</i>	
$\frac{1}{2}$ " dia.	12 lengths	2" dia.	2 lengths
1 " dia.	39 lengths	3" dia.	2 lengths
$1\frac{1}{2}$ " dia.	7 lengths		
2 " dia.	20 lengths		

Muara:

Maintenance work was satisfactorily carried out during the year. Supplies were connected to the new shop-houses, and the Government Quarters. The following figures show the total lengths of pipes laid:—

2 " dia.	799 feet.
$1\frac{1}{2}$ " dia.	273 feet.
1 " dia.	420 feet.

New connections made during the year were:—

Government	1
Private	12
Public Stand-pipes	3
Temporary	1
Total	<hr/> 17 <hr/>

Serasa:

This supply was extended to provide 5 additional stand-pipes for the *Kampong*. Altogether 350 feet of $1\frac{1}{2}$ " and 510 feet of 1" pipes were laid.

Jerudong:

The following new connections were carried out during the year:—

Government	3
Private	3
Public Stand-pipes	1
Total	<u>7</u>

Bangar:

Maintenance work was carried out during the year, and 2 new connections were made to Government Quarters. Work is now in progress on a dam at Punai which will supply water to the new school, Government quarters and the *Kampung*.

GAS SUPPLY

This is confined to the Kuala Belait and Seria areas, where waste gas from the oilfields at Seria is utilised. Ample supplies of this natural gas are available, but the present distribution system will soon be inadequate for the rapidly expanding town areas of Seria and Kuala Belait. A complete new reticulation scheme has been proposed, and the expenditure of \$611,500 has been approved in order to give an adequate supply to a much larger area than is covered by the present system. The ordering of materials for this new supply should be started early in 1956, and it is hoped to have the scheme well under way by the end of the year. Connections were still made on the old distribution system, but by the end of the year, this had almost reached saturation point.

Number of connections made in 1955 660

Lengths of pipe laid in 1955:—

<i>Kuala Belait</i>		<i>Seria</i>	
$\frac{1}{2}$ " dia.	114 lengths	$\frac{1}{2}$ " dia.	55 lengths
$\frac{3}{4}$ " dia.	8 lengths	1 " dia.	101 lengths
1 " dia.	62 lengths	$1\frac{1}{2}$ " dia.	49 lengths
$1\frac{1}{2}$ " dia.	232 lengths		
2 " dia.	2 lengths		

It was also necessary to replace the following lengths:—

<i>Kuala Belait</i>		<i>Seria</i>	
$\frac{1}{2}$ " dia.	22 lengths	1" dia.	5 lengths
1 " dia.	46 lengths	2" dia.	1 length
$1\frac{1}{2}$ " dia.	29 lengths		
2 " dia.	6 lengths		

ELECTRICAL DEPARTMENT

GENERAL REVIEW

The year under review was characterised by the commissioning of additional plant in Brunei, and the concluding of an arrangement with the British Malayan Petroleum Company Limited for the purchase of bulk supply for Belait and Seria Area, with consequent relaxation of the frustrating restrictions on the use of electricity.

The sales of electricity in all categories showed noteworthy advances, notwithstanding the restrictions imposed during the first 10 months of the year.

Construction of the second 280 K.W. set in the Brunei Power Station continued to be up to schedule and this is expected to be put into commission in early February, 1956. This will then bring the total installed plant capacity of the Brunei Power Station to 1,010 K.W. It is anticipated, however, that the maximum system demand will then have reached the safe limit of the installed plant capacity by 1957/1958, in the event of which, a new Power Station with bigger generating sets will be required.

As a result of the British Malayan Petroleum Company's prospecting for oil at Jerudong, the chances of obtaining cheap natural gas for the generation of electricity has considerably altered the situation, and consequently, the final phase of siting a power house, and the type of Plant required, are to be kept in abeyance pending the outcome of the exploration.

2,095,677 units were generated and purchased during the year as compared with 1,534,521 units for the preceding year, an increase of 36.5 percent.

The number of consumers connected to the system showed an increase from 1,529 at 31st December, 1954, to 1,975 at 31st December, 1955. This represents an increase of 29.1 percent.

Sale of electricity totalled 1,902,077 units, an increase of 47.9 percent over the preceding year where sales totalled 1,296,049 units.

The revenue for the year amounted to \$408,538.03 an increase of \$123,860.65 on the previous year.

Capital expenditure during the year amounted to \$699,967.00 bringing the gross book value to \$1,659,498.00.

The demand for hire of domestic appliances continued to make good headway and at the end of the year under review the Department had invested \$206,291.00.

DEVELOPMENT SCHEME

A comprehensive report by Messrs. Preece, Cardew and Rider, concerning the Brunei Electrification Scheme, costing \$9,000,000.00 was finally abandoned, and approval was obtained for \$4,000,000.00 to cover the scheme.

During the year under review, greater attention was given to long-term technical investigation, development of the distribution system for Brunei, Kuala Belait and Seria, and diesel generating stations for small towns, as a result of which considerable materials have been ordered for various projects.

At the end of the year, preparations were made to commence work on the rehabilitation and extension of the Brunei Town distribution system. The laying of 8,187 yards of underground cable, and the construction of 5 indoor substations with a total of 1,200 K.V.A. were completed and commissioned. The laying of 11 K.V. and 660 volt underground cables, and the construction of further 5 indoor substations are in progress.

No accident occurred during the year.

All sections of the Department have had a very busy year and have achieved commendable progress in the face of many difficulties arising from shortage of staff and delayed deliveries of Plant. The State Electrical Engineer desires to put on record

his appreciation of the loyal and conscientious efforts of the staff who have contributed so largely to the achievements recorded in this report.

BRUNEI TOWN

The operation and maintenance of the Power Station in Brunei Town continued satisfactorily without a single major breakdown taking place. The installation of one 280 K.W. Ruston and Hornsby oil generating set in the latter part of November brought the total capacity of the station to 730 K.W.

As in 1954 the Electrical Department was unable to meet the full demand of light and power requested by the public, due to insufficient strength of the distribution system. It is, even then, satisfactory to record that the maximum possible output was derived to meet the additional power required for lighting and small power.

With the installation of an additional 280 K.W. generating set, and the commissioning of five indoor substations fed by newly laid underground cables, together with the erection of new overhead distribution lines of increased capacity, it was possible to remove the restrictions imposed on the use of electricity. Moreover, it was possible to meet the further demand for the supply of electricity that poured in after the restrictions had been removed.

The total units generated during the year under review was 1,247,945 an increase of 276,645 or 28.48 percent on the previous year. The maximum load recorded during the year was 388 K.W. and the load factor was 34.7 percent.

Distribution:

(a) *Underground Cables.* With the arrival of further materials the work of laying the cables was started during the year, and up to the close of the year the total lengths of cable laid were as follows:—

11 K.V. 0.15	sq. in.	3,739 yards
11 K.V. 0.075	sq. in.	1,026 yards
11 K.V. 0.0225	sq. in.	2,443 yards
L.T. 0.1	sq. in.	1,979 yards

A total of 21 straight through, 30 indoor and 10 outdoor, all H.T., joints were made.

In addition, 2 tee joints and 4 outdoor joints, all L.T., were also made.

The work of laying cable and making joints is still in progress.

(b) *Substations.* During the year under review the work of constructing the substations was put in hand by the Public Works Department and up to the year seven substations were completed. Work on the other substations is in hand.

Up to the close of the year five substations have been put in commission namely—

- (i) Tasek Substation with 1—300 K.V.A. transformer.
- (ii) Kumbang Pasang Substation with 1—300 K.V.A. transformer.
- (iii) Hospital Substation with 1—300 K.V.A. transformer.
- (iv) *Istana* Substation with 1—150 K.V.A. transformer.
- (v) Tutong Road Mile 1 Substation with 1—100 K.V.A. transformer.

Work of putting the other substations in commission is in hand.

(c) *L. T. Distribution Overhead Mains:* New overhead L.T. lines of increased capacity have been run and at the close of the year the following lengths of lines have been erected:—

(1) Tasek Substation.

- (i) 0.15 sq. in. — 832 yards
- (ii) 0.075 sq. in. — 444 yards

(2) Kumbang Pasang Substation.

- (i) 0.15 sq. in. — 987 yards
- (ii) 0.1 sq. in. — 436 yards
- (iii) 0.075 sq. in. — 865 yards

(3) Hospital Substation.

- (i) 0.1 sq. in. — 97 yards

(4) *Istana Substation.*

- (i) 0.15 sq. in. — 415 yards
- (ii) 0.1 sq. in. — 364 yards
- (iii) No. 6 S.W.G. — 88 yards

In addition a temporary single phase line was run from the Berakas Airport to the site of the proposed erection of a radio beacon. The length of the mains so run was 964 yards of No. 6 S.W.G. copper, and 300 yards of 7/.044 P.B.V. insulated wire.

Consumers:

The total number of consumers connected at the end of the year was 1,091 showing an increase of 221 over the previous year. In Government Quarters and Buildings, 1,985 new points were wired and 68 points rewired.

Meters and Protection:

The total number of meters installed at the end of the year was 1,233 as compared with 957 in 1954. Dispute tests were carried out on 3 meters during the year and in all three cases the deposits were forfeited.

The protection system operated satisfactorily.

Public Lighting:

The total number of street lamps connected on the system at the end of the year remained at 70.

Routine inspections and relamping were maintained throughout the year.

Domestic Appliances:

Details of domestic apparatus on hire at the end of the year are as follows:—

	1954	1955
Cookers	8	27
Water Heaters	13	27
Ceiling Fans	14	32
Table Fans	37	52
Refrigerators	125	166
Air Conditioners	1	2
Washing Machines	—	6
Freezers	—	2

Statistics:

	1953	1954	1955
Lighting Consumers	542	653	792
Power Consumers	154	225	299
Total Consumers	696	878	1,091
	1954	1955	
Total units generated	971,300	1,247,945	
Total units sold	799,097	1,091,424	
Total units used in works	15,129	18,224	
Total Magnetising unit	18,372	39,925	
Total units unaccounted for	—	7.9%	
Number of gallons of fuel used	66,935	87,851	
B.Th.U's per unit generated (B.Th.U's per pound of fuel are taken as 18,800)	—	12,350	
Installed plant capacity	450	730	
Maximum demand	295	388	
Load factor percentage	—	34.7	

KUALA BELAIT

The operation and maintenance of the Power Station in Kuala Belait continued satisfactorily without a single major breakdown. The total installed plant capacity of the station is 257 K.W., and the effective plant capacity is 172 K.W.

It is expected to purchase bulk electricity supply from the British Malayan Petroleum Company Limited during 1956, and therefore, no further generating sets were ordered, although the maximum demand of the station has exceeded the effective plant capacity.

The total units generated during the year under review was 546,477 showing an increase of 109,991 or 25.2 percent and the load factor was 30 percent. The total fuel used (excluding fuel used for mile 4 engine and for cleaning) was 47,806½ gallons, and the fuel consumption was 0.82 lbs. per unit generated.

Distribution:

The entire overhead system was regularly inspected and maintained in effective condition throughout the year. For the extension of the overhead system, poles planted and copper wire used were as follows:—

1. 34 ft. Step Poles	23
2. 30 ft. Step Poles	41
3. 27 ft. pipe poles (temporary)	73
4. 0.1 sq. in. hard drawn copper wire	6,379 yards
5. 0.075 sq. in. hard drawn copper wire	3,389 yards
6. No. 2 S.W.G. Copper wire	4,100 yards
7. No. 4 S.W.G. Copper wire	1,965 yards
8. No. 6 S.W.G. Copper wire	4,527 yards
9. No. 8 S.W.G. Copper wire	913 yards
10. Lighting wire	1,605 yards

Consumers:

The total number of consumers connected at the end of the year was 609 showing an increase of 107. In Government Quarters 328 new points were wired and 266 existing points were rewired in conduit.

Meters and Protection:

The total number of meters installed during the year was 101 and the protection system operated satisfactorily.

Public Lighting:

The total number of street lights connected at the end of the year was 58 compared with 50 in 1954. Routine inspection and relamping was maintained throughout the year.

Domestic Appliances:

Details of domestic appliances on hire at the end of the year were as follows:—

	1954	1955
Table Fans	3	3
Refrigerators	34	50
Air Conditioners	2	6

Statistics:

	1953	1954	1955
Lighting consumers	300	347	427
Power consumers	50	161	181
Total units generated and purchased	213,605	453,188	563,824
Total units sold	169,470	405,232	533,069
Total units used in works	202	4,254	6,546
Total units unaccounted for	43,933	43,702	24,209
Revenue per unit sold	26.8cts.	22.1cts.	22.4cts.
Expenditure per unit sold	32.5cts.	18.5cts.	19.6cts.
Fuel used in gallons (excluding mile 4 used 4,653 gallons)	9,065	36,665½	47,806½

SERIA

The Power Station was closed down on the 12th May, 1955, and the supply was tapped from British Malayan Petroleum Company's transformer station G-26 Lorong two.

The total units generated during the year under review was 67,612 and the total units purchased was 216,296. The maximum demand was 155 K.W.

Distribution:

The entire overhead system was regularly inspected and maintained in efficient condition throughout the year.

For the extension of the overhead system, poles planted and copper wire used during the year were as follows: —

1. 35 feet step poles	16
2. 30 feet step poles	31
3. 30 feet temporary pipe poles	8
4. 25 feet temporary pipe poles	10
5. 0.15 sq. in. hard drawn copper wire	1,560 yards
6. 0.1 sq. in. hard drawn copper wire	3,720 yards
7. 0.075 sq. in. hard drawn copper wire	2,114 yards
8. No. 2 S.W.G. copper wire	345 yards
9. No. 6 S.W.G. copper wire	2,614 yards
10. No. 10 S.W.G. copper wire	490 yards
11. Lighting wire	2,060 yards

Consumers:

The total number of consumers connected at the end of the year was 276 showing an increase of 133. In Government Quarters 15 new points were fixed.

Meters and Protection:

The total number of meters installed during the end of the year was 4. Routine inspection and relamping was maintained throughout the year.

Domestic Appliances:

Details of apparatus on hire at the end of the year are given below:—

	1954	1955
Refrigerators	2	4

Statistics:

	1953	1954	1955
Lighting consumers	37	107	198
Power consumers	3	36	78
Total units generated and purchased	27,428	110,033	283,908
Total units sold	22,750	91,720	277,584
Total units used in works	—	1,893	2,215
Total units unaccounted for	4,678	16,420	4,509
Revenue per unit sold	29.9cts.	24.2cts.	20.9cts.
Expenditure per unit sold	25.8cts.	26.9cts.	13.6cts.

TUTONG

The Tutong Electrification Scheme was first put into operation in August, 1955, and a plot of land for the Power Station site was surveyed, marked and pegged out for jungle clearance. The route for the erection of High and Low Tension mains was also marked and pegged out.

The Power Station site was cleared of all jungle growth and levelled off. Foundations for the 2 — 70 K.W. sets were laid. Due to shipping delays the materials for the housing only arrived late in the year. It is expected that the erection of the Power house will be completed before the end of March, 1956.

Distribution:

Erection of poles for both High and Low Tension mains has started during the year. A total of 40 x 34 feet and 8 x 28 feet

poles were erected. The work of planting and erecting stays and struts is proceeding and it is expected to start straining the wire early in the coming year.

Installation:

Forty-one Government Quarters and Buildings have been wired. The total number of points wired was 395.

The work of wiring private houses and buildings by private contractors is also proceeding and up to the end of the year 17 shophouses with a total of 105 points have already been wired.

UNALLOCATED STORES

The year 1955 started with a carry-forward stock to the value of \$61,518.90. Total purchases and issues during the year amounted to \$192,570.56 and \$77,592.08 respectively. The closing balance at the end of December, 1955 was \$176,497.38. Materials purchased through the Crown Agents amounted to more than 70% of the total purchase.

There is also an allocated stores account and the total purchase under this account came to \$796,246.00 of which more than 90% were purchased through the Crown Agents.

GENERAL

The Profit and Loss account is shown in Appendix "O".

Mr. E. Rajaratnam, A.I.E.E. (England) substantive holder continued to officiate as State Electrical Engineer.

CHAPTER XI.

COMMUNICATIONS

SHIPPING

Kuala Belait:

SITUATED on the right bank of the Belait River about half a mile upstream from the river mouth, this port is extremely difficult to enter owing to the existence of a shallow sand bar lying right across the river mouth and over which heavy surf is constantly breaking. A shallow channel for vessels drawing up to 8' leads through the bar and is indicated by marker beacons in transit. This channel, however, is very narrow, and during the year a number of craft attempting it through the heavy surf found themselves in difficulties. Fortunately, no loss of life was experienced, and of some half dozen incidents only one vessel was a total loss. This vessel, the Tug "Red Leaf", grounded on the bar in heavy surf and was further disabled by her tow, a 200 ton dumb steel lighter, drifting alongside. The tugs crew abandoned ship by jumping on board the lighter which was then cast off and drifted safely ashore, but the "Red Leaf", probably holed by the pounding, sank just clear of the channel.

The total tonnage of shipping handled in Kuala Belait during the year, of which approximately 50% is or for the British Malayan Petroleum Company Limited is as follows:—

In	300,184
Out	297,635

Facilities: There are four wharves in Kuala Belait, the largest of which, approximately 375' in length is owned by the British Malayan Petroleum Company Limited, and is used mainly by the Company's own vessels, commercial and other craft proceeding direct to the two Government wharves situated a short distance further upstream.

The work of joining these two Government wharves together was commenced during the year, and on completion will provide about 350' of Government wharfage in one long span.

Fresh water is not available to shipping in Kuala Belait and vessels using this port obtain their supplies in Miri, Labuan or Brunei Town.

Fuel oil and lubricants are obtainable in 44 gallon drums, and also a limited supply of fresh and dry provisions. There are two Company owned cranes, one with a lifting capacity of 20 tons, operated on the Company's wharf, and a 10 ton Mobile crane operated by the Marine Department and available for private hire, on Government wharf.

The Straits Steamship Company's coaster type vessels continue to ply regularly between Kuala Belait and Labuan and operate a shuttle feeder service to these and other ports in the Brunei Bay area. The bulk of cargoes landed in Kuala Belait, however, are for the British Malayan Petroleum Company and are carried by the Company's own fleet of L.C.T.s.

Native craft based on this port consist of large Outboard motor boats and small launches and are used to carry local produce and merchandise up and down the Belait river and on short coastal voyages.

Tutong:

Situated on the Northern bank of the Tutong River about 8 miles up stream.

Facilities: As the Tutong river is navigable by small native craft and light launches only, very little facilities are provided for shipping at Tutong village. Like most ports on the West coast of Borneo, the entrance to Tutong River is difficult owing to the existence of a shallow, shifting sand bar across the river mouth. The village, which is on the main road between Brunei Town and the oilfields, possess a 20' wooden wharf used mainly by native craft plying between Tutong and the upper reaches of the river, and as a stand-by berth for Government outboards and launches used as patrol boats and travelling dispensaries, etc.

A Government owned and operated vehicle ferry service plys between Kuala Tutong on the North Bank of the river mouth and Danau, on the South Bank. This service forms a main link between the two halves of the State separated by the Tutong river, and is in constant operation ferrying vehicles, the volume of traffic which considerably increased during the year. Quite early in 1955 it became obvious that the one twin screw, wooden vehicle ferry would soon be inadequate to deal with the ever increasing traffic, and an order was placed for a much longer more modern vessel to be built in steel. Delivery of this vessel is expected early in 1956, and it is anticipated that a "shuttle" service operated by the two ferries will eliminate the necessity of "turn waiting" at each side of the river, and deal adequately with the largest of the heavy vehicles now using this service. In the latter half of the year the following vehicles were transported on this ferry:—

<i>Buses, Trucks</i>	<i>Land Rovers, Jeeps</i>	<i>Motor Cycles</i>
3,600	1,216	248

Muara (Brooketon):

Situated on the Western shore of Muara Harbour.

Facilities: A small pier with a depth of 7' alongside at LWS exists at Muara, and the harbour provides a completely sheltered anchorage in depths varying from 3 to 8½ fathoms. The pier is used mostly by fishing *perahus* and small native craft, and is not provided with fresh water for shipping.

Fuel and oil are not available in Muara, but small quantities of dry provisions may be obtained in the Bazaar.

The Muara Slipway and Engineering Company, a private concern who obtained permission to rebuild the formerly Government owned slipway in Muara, continue to operate and service vessels of up to 200 tons. Hull and engine overhauls are carried out at Muara by this Company and in the latter half of 1955 a total of 1,145.5 tons of shipping were accommodated on this small slipway, which, unfortunately and owing to its limited carriage rail length, is confined to the handling of shallow draft vessels only. These slipway and repair facilities in the vicinity of Brunei Town port provide a much needed and advantageous service for both Government and commercial launches which otherwise would

have to go to the Port of Labuan in the neighbouring Colony of British North Borneo, some four hours steam across Brunei Bay, or even down to Kuching in Sarawak, some 700 miles distant.

Brunei Town:

Brunei Town, the capital of the State of Brunei, situated about 9 miles up river from the Inner Bar where the Brunei river enters Brunei Bay.

Facilities: In addition to the 400' reinforced concrete Government wharf available for Government and commercial shipping, a 25' faced timber wharf was rebuilt by the Shell Co. Ltd. at Subok $1\frac{1}{2}$ miles down stream from the Town wharf, and is now used by the Company's tankers to service a bulk fuel oil installation completed in the latter half of the year.

Fresh water is available from 5 water points on the Town wharf and a reasonable supply of fuel oil, lubricants, and fresh and dry provisions can be obtained in the Town.

Heavy lifts can be catered for by prior arrangement, but otherwise shipping requiring lifts of over 10 tons have to rely on their own derricks.

The Straits Steamship Company continue to operate their local coastal services and the Singapore Brunei direct service which was introduced in 1953 and which was instrumental in relieving the "bottle-neck" occasioned by the transhipment of cargoes in Labuan—the bulk of Brunei consigned cargo now being delivered direct.

The total tonnage of shipping handled alongside Brunei Town wharf during the year again shows an increase on previous years:—

1953	1954	1955
100,476 N.R.T.	122,237 N.R.T.	138,331 N.R.T.

This continued increase is largely due to the inauguration of a bi-monthly service Hong Kong-Brunei by two different Hong Kong companies, one of which has now opened an agency in the Port of Brunei Town. The vessels used on this service are an 800 ton British built freighter, and an ex U.S.M. fleet supply vessel of similar tonnage. Arriving regularly with full cargoes,

these two vessels return to Hong Kong carrying logs, lumber, firewood and scrap metal. A fleet of tugs and lighters was also brought to Brunei by one of these companies and now operates a towage service along the coast. The above figures represent scheduled services only, and do not include the unscheduled vessels and native owned launches, *tongkangs*, and other craft which operate a coasting trade in local produce between Brunei and neighbouring ports in Brunei Bay, and make frequent use of the port of Brunei.

The Marine Department continues to operate the thrice weekly motor launch service carrying mail and passengers between Brunei and Labuan, and in 1955 carried a total of 24,921 passengers in and out of the State.

Figures are given below, together with those for previous years:—

	1953	1954	1955
Inward	12,018	13,238	13,863
Outward	10,601	11,565	11,058

Early in the year it became obvious that the two passenger launches which in addition to their other duties were operating this service, were unable to handle the increasing passenger traffic, and a serious backlog of "missed out" passengers was slowly building up both in Brunei and Labuan. By running extra services the balance of these passengers were transported, but it was not practicable to increase the thrice weekly schedule owing to other commitments and the necessity of withdrawing regularly either one of the two vessels for servicing, and an order was placed with a Hong Kong shipbuilding firm for the construction of a 110' twin screw all steel mail passenger and general purpose vessel for delivery early in 1956.

Additions to the State fleet during the year consisted of one twin screw Aluminium Alloy Ramped Cargo Lighter and one 45' single screw wooden hull bar launch specially designed for crossing Brunei's shallow sand bars with the minimum of danger.

Vessels operated by Government are listed below:—

One 85' twin screw sea going mail and passenger launch, M.V. "Sultan".

One 65' twin screw fast mail and passenger launch M.L. "Muara".

One 45' twin screw general purpose launch, M.L. "Pretty".

One 45' single screw bar launch, M.L. "Laila Menchanai".

One 35' single screw river launch, M.L. "Sri Seria".

One 65' single screw motor barge, M.B. "Awang Semaun".

Two 35' single screw work boats, M.'s "Sri Belait" and "Juanita".

One twin screw vehicle ferry, V.F. "Higgins".

One 25' single screw aluminium dispensary launch, M.L. "Dove".

In addition to the above, 5 thirty two foot 25 H.P. outboard motor launches were constructed and put into service, making a total of 30 in all. These outboard launches provide fast transport and services in the shallow upriver reaches of Brunei Waterways where larger vessels cannot navigate, and include amongst other duties those of travelling dispensaries, police, customs patrols, fisheries and lighthouse inspections etc.

Large ocean going ships cannot enter any of the ports in the State of Brunei, but vessels up to 4,000 G.R.T. continue to use the deep water anchorage off the Island of Baru Baru (approx. 2 miles east from the entrance to Brunei River) and there in perfect safety load lumber cargoes and firewood from barges and lighters.

By working the tides, however, vessels of up to 1,700 G.R.T. cross the inner bar, where at M.L.W.S. they are limited to a draft of 7', and proceed to Brunei Town wharf to discharge their cargo. After safely crossing the inner bar, the narrow bends and corners in the Brunei river form the chief obstacle to vessels wishing to reach the Town wharf was 250' O.A.L. with a loaded draft of 12', yet shorter ocean going freighters of approx. 180' O.A.L. frequently cross the bar drawing 16' and navigate these corners and bends to the Town wharf without any difficulty.

Navigational Aids — Lights:

Some difficulty was experienced with the re-inforced concrete stands constructed to support the electric lights purchased for the River lighting scheme, and it was not until after delivery of the lights, late in the year, that alterations and amendments to the stands could be put in hand. This work is now practically completed and the first of the new lights will be installed and put into operation in January, 1956, the remainder at approximate intervals of 1 month thereafter. Additional lights have been ordered to complete the scheme, and the whole work of installation will be finished in the 1st half of the new year.

Marine drilling platform locations off the coast have also been provided by the British Malayan Petroleum Company Limited with sea and air navigational warning lights.

Unlit Marker Beacons:

Practically all the marker beacons indicating the shallow channels in Brunei's many waterways were renewed during the year and a system of "sign post" marker beacons constructed and established to indicate the main channels between Brunei and neighbouring ports and outstations, which with a great saving of time, can be reached by smaller vessels by following the branches and back streams of the maze of waterways to be found at the head of Brunei rivers, and in which it is easy for visiting launches and sailormen who are not familiar with the local geography to get lost.

CIVIL AVIATION

Work on the Brunei Airport continued during the year, but at no period was there more than 900 yards available for use. This meant that only Rapide and similar light aircraft could use the airfield. Construction work on lengthening the airfield to 1,500 yards was carried out by the Heavy Equipment Section, and was in an advanced stage at the end of the year. The whole work is expected to be complete by April, 1956.

Materials used in construction this year included—

16,000 cu. yds.	Berakas Sand and Stones
120,936 cu. yds.	Clay Filling
2,000 cu. yds.	Crushed Stones

Despite the limited facilities, the Malayan Airways Feeder Service brought an ever increasing volume of traffic, as is shown by the following figures:—

In January there were 100 Aircraft movements with 202 passengers embarking or disembarking. By December there were 207 movements with 595 passengers embarking or disembarking, and the figures for the months in between show a steady progress to the high figure for December. The total for the year was 1,740 Aircraft movements, and 4,331 passengers.

The air service still remains sadly inadequate for the requirement, as is shown by the fact that the Government launch service carried 24,921 passengers between Brunei and Labuan during the year. It may safely be assumed that not less than 50% of these passengers would prefer to travel by air if seats could be obtained. As it is, bookings must often be made two or three weeks in advance to ensure a seat.

Designs were completed during the year for a terminal building at the airport, and the contract for this work was let to the China Construction Co., Ltd. It is hoped that the airfield will be completed, and the terminal building opened by late 1957.

The British Malayan Petroleum Company Limited maintained their private airfield in service at Anduki, the landing fees being paid by the Government as part of the Feeder service Agreement.

The British Malayan Petroleum Company had the following aircraft on their register during the year:—

Auster Aircraft	VRUDO
Short Sealand	VRUDV
Short Sealand	VRUDS
Percival Prince	VRUDA
Percival Prince	VRUDB
Percival Prince	VRUDR

A Helicopter, operated under Charter from Bahamas Helicopters Ltd. was also introduced by the Company during the year. The B.M.P. Co's aircraft are used exclusively on the Company's own business, and for transporting Company personnel between Lutong, Anduki and Labuan.

There was one accident during the year when an Auster Aircraft landing at Brunei Airport, bent its propellor and damaged the engine. No one was hurt.

ROADS

The Year 1955 the second of the three year development programme marked the real start of the planned works. In 1954 although a great deal of preliminary work was carried out, this work was mainly of type that could be utilised to bring materials to sites, and due to shortage of trained staff, little planned development could take place. The acquisition of plant also required time, and much of 1954 was devoted to this work.

In 1955 the bulk of the plant requirements had been obtained, and the appointment of the Road Section Staff had been made.

The Chief Roads Engineer, with two Roads Engineers took up appointments during February, 1955, whilst another Road Engineer arrived at the beginning of the year. Three Technical Assistants also took up positions in the latter part of February.

For the first three months of 1955 the Roads programme was carried on with the P.W.D. staff, and Roads Section organisation did not commence operations until 1st April.

With the formation of Road Section of P.W.D. a commencement was made on the investigation and survey and planning for the various Development works to be undertaken. The shortage of Technical Assistants and Surveyors made this work somewhat slow, but it was possible to keep planning ahead of the actual construction work, and to provide sufficient information to allow for Government survey officers to proceed with necessary land resumptions etc.

With a review of the position in May, 1955, authority was given for the employment of 5 experienced Roads Foremen, to be engaged from Australia, and to be placed in charge of the larger construction projects. To the end of 1955 four had been appointed, and of these three had taken up positions. The appointment of these foremen greatly eased the problem of supervision, and has produced a much higher standard of work all round, and in addition has provided an efficient training organisation for the local road workers.

The year was not a good one for road construction. The weather was exceptionally wet, and long delays were experienced on all earth works due to the inability of plant to handle the conditions. The location of oil in the Jerudong area threw a great volume of traffic on to the Tutong Road, which was already showing signs of distress due to the increase in loads and number of trucks engaged on Development projects. The very heavy loads that comprised the drill rigs etc. managed to get through, but in the process, old culvert structures etc. collapsed, completely upsetting the drainage of the road, with the result that long sections broke up completely, and became impassable to any traffic. Joint operations were carried out by P.W.D. Road Section and the B.M.P. Co. in an attempt to restore traffic. B.M.P. supplied a number of trucks, and two heavy graders, whilst P.W.D. supplied all necessary labour, spreading facilities, trucks and material from Berakas Quarry. Restoration of the road surface took approximately 3 months, and the material placed down was wherever possible designed to be incorporated in the future planned improvement works. Since the completion of the repairs it has been possible to maintain the road in reasonable condition.

The location of the new oilfields at Jerudong, and the very large programme of bores planned by B.M.P. has made the original scheme for the Tutong Road obsolete, and it has now become necessary to completely re-design the road, improve the alignments, and to provide detailed designs for new and heavier drainage structures over the whole length. This work is proceeding as fast as possible, and a number of new structures have been put in hand.

Since the formation of Road Section continuous experiments have been carried out with soil cement stabilisation, in the hope that this process could be used as a substitute for stone bases.

A trial length of stabilisation had been carried out in late 1954 in Brunei Town, Wireless Hill, and the results here showed that the process had distinct possibilities, although this work had been carried out with a somewhat make shift plant. In April 1955 a length of construction work in heavy fill was undertaken near 4 mile on the Tutong Road. This heavy fill became waterlogged due to heavy rains, and it became impossible to operate any plant on the work, nor could traffic get along on the new

work. To speed up the work it was decided to carry out some experimental stabilising work over the damaged subgrade, and a $4\frac{1}{2}$ inch consolidated pavement of locally procured sand clay stabilised with 10% cement was laid down, this coat was later surfaced with a three inch bitumen grouted crushed stone wearing course. The pavement has been carrying traffic now for over 9 months, this including all the heavy drilling equipment for the B.M.P. operations at Jerudong, some of the loads up to 57 tons on three axles, and to date there has been no sign of any failure of the stabilised section. The result has been very gratifying, and has encouraged the extension of this form of road construction.

With the complete success of this stabilised section, and with knowledge gained from a succession of tests carried out in the Road Section Soil Laboratory, a long length of stabilised pavement was put down extending from Kuala Tutong for a distance of $3\frac{1}{2}$ miles towards Tutong Town. This pavement has also proved highly successful although the beach sands available are not considered ideal for the purpose.

The first two works above were carried out with inefficient plant, but the success of the method encouraged the purchase of modern stabilising equipment, and the first of three units ordered, came into service on December 8th, 1955. This unit, a Seaman Trav-L-Plant has completed a very large length of new stabilised pavement in a very short time. Two additional units will come into operation early in 1956.

A number of new concrete bridges were constructed and completed during 1955 by private Contractors; one in Kuala Belait, one in Brunei Town, two on the Brunei-Tutong Road and three on the Lumut-Liang Danau new road survey.

Lack of Engineering and Technical staff in the early part of 1955 necessarily slowed up the programme, but it was possible to keep designs slightly ahead of the actual construction work, and with the arrival of additional staff later in the year, a considerable speeding up on design and planning of work was possible.

The completion of new road works during 1955 has not been up to the planned programme requirements, but this is necessarily caused by the amount of detail survey and planning that has to be done before actual road construction can commence.

The benefits of this planning will be seen in the following years, when rate of completion of works should approach the target.

A review of the main operations of Road Section for 1955 show that considerable work has been carried out by the various units, and a list of the more important results are set out below:—

Employees engaged on road works — Day Labour	1,342
Contract	248
Total	<u>1,590</u>

New Road Construction, Brunei Town, and Kuala Belait, Seria. 5M. 13 ch.

Surface sealing of pavement, Brunei Town, Kuala Belait, Seria, etc. 128,355 Syds. (Equivalent to $10\frac{1}{2}$ miles, of 21' pavement).

New road formations completed $13\frac{1}{2}$ miles.

Road Surveys completed 53 miles.

Bridle paths constructed 1955 $24\frac{1}{4}$ miles.

New bridges on bridle paths, 56.

Construction of concrete drains Brunei Town, Kuala Belait, Seria. 6M. 41 ch.

New pipe culverts constructed, 92.

R.C. Box Culverts, 2.

Traffic bridges in wood and concrete, 8, totalling 349 ft. in length.

Cement stabilised pavement 43,120 Syds. ($=3\frac{1}{2}$ miles of 21' pavement).

Improvements to pavements in prep. for surfacing 46,200 Syds. ($=3\frac{3}{4}$ miles of 21' pavement).

Construction of new shoulders to roads, 12 miles 40 chs.

Clearing of Rivers, 12 miles.

Construction of new side drains to roads, $18\frac{1}{2}$ miles.

Waterbound macadam road pavements, 2 miles.

Stone crushed, carted, and spread on roads, 39,135 Cyds.

Berakas Quarry stone hauled and spread on roads, 17,045 Cyds.

Bitumen and bituminous emulsions sprayed on roads, 16,907 gall.

Cement used in stabilising works, 23,500 bags.

Cement concrete pipes manufactured and placed in roads 1,222.

Major tests carried out in Soil Laboratory, 510.

The early part of 1955 was taken up mainly in investigation and survey, to enable works to proceed on a planned basis and the greater bulk of the work listed above has taken place in the second half of the year, so that it can be seen that works have been greatly accelerated as the investigation and designs have been prepared, and this acceleration should continue into the coming year, with the gradual building up to the technical and design staff.

Details of the various roads and projects undertaken are given below:—

Brunei Town Roads: New road construction has proceeded well during the year. A total of 14,685 Lft. of new road construction was completed and surfaced with bitumen. New concrete drains were constructed in various housing areas totalling 14,649 Lft.

Surface reseals of all the earlier constructed roads were completed, this work covering an area of 50,275 Syds.

Road designs were prepared for new works extending from Brunei Hospital to Tongkadeh Bridge, and work commenced as the moving of electric and telephone lines would allow. Design of new approach roads to Clifford Bridge was completed, but owing to difficulties in the moving of telephone and electric services, work has had to be confined to drainage projects only for the present.

The extension of the surfaced road to Berakas airport has been pushed ahead, and the work completed to the airport by-pass turnoff.

New road construction with drainage was commenced late in the year extending from Kianggeh Bridge towards the Residency.

Construction of a new concrete bridge over *Sungei Tongkadeh* was completed, and work is now in hand with the completion of new approach roads.

Kuala Belait, Seria Town Roads: Considerable road construction and drainage work has been completed during the year. A total of 12,584 Lft. of new road construction was completed, and the majority of this road has been provided with a penetration wearing coat, or surface sealed. A total of 35,200 Syds. of penetration wearing coat work was provided.

Concrete drains, both main and subsidiary, were constructed for a total length of 14,228 Lft., and at the end of the year, contracts were in hand for completion of a further 4,518 Lft. of new drains.

A new concrete bridge was constructed over the main storm-water drain near the P.W.D. Offices, providing access to the new P.W.D. Depot site.

Tutong Road: This road suffered very severely from the weather conditions experienced throughout the year, and later by the movement of heavy traffic to and from the Jerudong Oil Fields. The new construction work did not get under way until late in the year owing to the need to provide detailed surveys and designs of works, and to acquire the necessary land to enable improvements in widths and alignments to proceed.

Road survey and design was completed to the 18½ miles and necessary steps taken to acquire all land.

In September the section of road from 4 mile to 11 mile due to influences of excessive traffic and loads combined with exceptionally wet conditions, became untrafficable and emergency repairs had to be commenced. The Road Section and B.M.P. combined efforts, and placed all available trucks and graders on the repairs, and as a result of nearly three months continuous work the section of road was restored for full time traffic. The emergency repairs made necessary, seriously delayed the reconstruction work, as all plant and equipment had to be thrown in to speed up repairs.

The collapse of sections of the Tutong Road was mainly due to the failure of old drainage structures, and an all out efforts has

been made since to replace all the old structures with either new pipe culverts, or heavy R.C. Box culverts.

Soil stabilising with cement and local sand clays has been carried on in various sections along the road, and these sections are standing up well to the heavy traffic loads. Short lengths have been completed and covered with bituminous coats at the 4 mile. 14½ miles and a length of 3½ miles constructed on the Kuala Tutong Rentis. This latter length is now being covered with a waterbound macadam wearing coat. Total quantity of stabilising carried out on this road during 1955 amounted to 36,960 Syds. (equivalent to 3 miles of 21' pavement).

A new concrete bridge was completed at 14½ miles to replace the old wooden structure, and a second bridge at 26½ mile is almost complete and is due to be open for traffic early in 1956.

Approximately 9,000 Syds. of surface seals in bitumen and emulsion have been completed during the year.

Road formation has been widened and brought up to standard in preparation for new pavements over a length of 8½ miles, whilst shoulders and new side drains have been constructed over a total length of 14½ miles.

The addition of cement stabilised pavements over the newly prepared formations, commenced on the 8th December, on the arrival of the new heavy Seaman Trav-L-Plant. Since the commencement of work with this machine, a considerable amount of work has been carried out, and the work progressively linked up, to give a finished road surface from 4 mile to the 6 mile. With the arrival of new plants, the provision of this improved pavement will be accelerated, and it is hoped that new construction will be completed to 10-11 mile before the middle of 1956.

Road construction along the Tutong road has been retarded by weather, and heavy traffic, but there has also been considerable delay due to the plant position, and also to the serious shortage of stone and material necessary for finishing off the roads. The stone situation has been affected by plant breakdowns, and also to a great extent by adverse tides, which have prevented the delivery of gravel to the crushers.

Berakas Road: During 1955 slow but steady improvement work has been carried out to this road. The old Berakas stone surface is being covered with a 3" crushed metal penetration bitumen coat, and this work has been completed over a total area of 27,720 Syds. ($=2\frac{1}{4}$ miles) of road surface. New shoulders have been constructed for a length of 8,800 Lyds. and 16 new pipe culverts have been placed in position.

With the serious position on the Tutong Road, and the necessity to concentrate all plant on this road, it became necessary to slow down new construction on the Berakas road.

Construction work on the Airfield by-pass has proceeded satisfactorily, and at the end of the year some 70 per cent. of the earthwork had been completed. The construction of large R.C. box culverts is now in hand, and it is expected that one road should be available for traffic in March of 1956.

(1) The maintenance of the road was carried out by the Heavy Equipment Section, with a Mandor, 15 labourers and a grader and road roller. A new length of road was cut by this section at mile 9, in order to straighten out a bad bend and hill. A culvert was constructed by the Road Section, and the clay filling and stone topping was completed in September. A small area was also cleared at mile 4 for an access road into the Burong Pingei Settlement Area. The formation was filled with 8" of Berakas stone and sand for a length of approximately $\frac{1}{10}$ th mile.

Muara Road: A Survey is being carried out over the whole length of this road, so that a planned development can be undertaken. Little new construction has been completed in the year, but isolated lengths of road have been improved and prepared for new pavements, and generally the road surface made more trafficable. Surface sealing and penetration work has been completed over an area of road of 6,160 Syds. ($=\frac{1}{2}$ mile).

Improvements to pavements in preparation for addition of surfacing, covers 46,200 Syds. ($=3\frac{3}{4}$ miles) and addition of new shoulders extends over a length of 4,400 Lyds.

Work is proceeding on experimental soil stabilisation road pavements new Muara. The work here is in the nature of an

experiment, as the local materials are not very suitable for stabilising processes, and it is intended to study the sections laid down before carrying out additional work.

Jerudong Road: No new construction work was carried out during the year, as it was decided to cart large amounts of fill over this road for works on the Tutong Road, and new construction was delayed, until this cartage had been completed. The road has been well maintained during the year.

Kuala Abang Road: Maintenance work only has been carried out on this road, and minor improvements carried out on swampy sections.

Limbang Road: Maintenance has been carried out on this road and the surface has been well maintained during the year.

Bangar Pandaruan Road: Considerable improvement has been effected to this road, and it is now in good order. Bridges and culverts have been well maintained.

Anduki-Lumut-Liang Danau: Survey of the length of road, Lumut to Danau, was completed early in the year, and Contracts let to Ewart & Company for the construction of three concrete bridges at Lumut, Liang, and Tungaliang. These bridges are now complete. Construction work on the section of road from Liang, and extending towards Lumut, was commenced in April, and proceeded through until October, when weather conditions became unfavourable and work was stopped until early in the year 1956. At the time of stopping, some $2\frac{1}{2}$ miles of formation had been carried out to rough grades. With the stoppage of work at Liang, plant was moved on to the Section Danau to Telisai, and by the end of the year, nearly three miles of new formation had been completed, and at the date of this report a further $3\frac{1}{2}$ miles of formation has been completed.

The work in this area has called for the building up of a complete organisation at Liang, and a large camp with all facilities has been established. This camp will serve the whole road construction in this area.

A Survey has been completed of the proposed new road line from Anduki to Lumut, and it is expected that work will commence on new construction early in the coming year.

A large number of concrete box culverts etc. are being placed along the whole length of these roads.

Tutong-Talamba, Telisai: This 12 mile length has been surveyed, and two large bridge sites located and investigated. The line runs through undeveloped country and generally is very favourable for road construction. A new bridge site near Tutong over the Tutong River, and a second bridge site over the Telamba River near Telisai will eliminate the Kuala Tutong Ferry service. Tenders have been called for the design and construction of these bridges.

Labi Road: Late in 1955 the Labi Road and structures was purchased from the B.M.P. Coy., and road section has now set up an organisation at Bukit Puan to maintain the road and bridges. The old Company buildings have been taken over where required, and the installations at Bukit Puan improved and added to, so as to provide facilities for a full size road camp and maintenance workshop. Provision has also been made to house a Road Foreman and family. New plant has been obtained for this road, and most of this was in operation before the end of the year. The road has been well maintained, although several sections have suffered by slips in cuttings, but these are being moved as the new plant comes into operation.

Bridle Paths: All bridle paths have been well maintained during the year, and considerable additions have been made to the constructed lengths. Some $24\frac{1}{2}$ miles of new paths were constructed, and 56 bridges provided on these paths.

Bitumen Spraying Unit, Brunei: This unit came into operation in June of 1955, with the arrival of two new mobile sprayers, together with heaters and other gear. A competent and experienced foreman was obtained from Australia, and under his guidance the unit has proved highly satisfactory. The men on the operations have generally taken a keen interest in their work, and have adapted themselves quickly to carry out the job in a competent manner. In the short period of existence the units have sprayed over 93,000 Syds. of road surface, using nearly 17,000 gall. of bitumens and emulsions, and 1,400 Cyds. of imported granite chippings.

This unit is being extended with the addition of a complete mix plant to be installed in Brunei, together with Barber Greene Tamper and finisher, and these units should enable a very high standard of work to be produced.

TELECOMMUNICATIONS

A direct radio telegraph service is maintained between Brunei and Singapore, and also with Kuala Belait, Seria and Temburong within the State, Jesselton and Labuan in North Borneo, and Kuching and Limbang in Sarawak.

Most of the V.H.F. equipment for the V.H.F. radiotelephone system has been installed. One 150 feet self supporting Tower was erected at *Bukit Saillelah* near Brunei Town.

Radiotelephone circuits have been opened between the following places, Brunei Town, Tutong, Kuala Belait, Miri, Limbang, Labuan and Jesselton.

The construction of a building for the automatic telephone exchange at Kuala Belait is progressing satisfactorily.

New buildings for the High Frequency Wireless Transmitters at mile 2 *Jalan Tutong*, has been completed and occupied.

The title of "Wireless Engineer, Brunei", a post held by Pengiran Kerma Indra Mohamed, M.B.E., has been changed to "Controller of Telecommunications".

POST OFFICES

There are six Post Offices in Brunei State, situated in Brunei Town, Tutong, Bangar (Temburong District), Kuala Belait, Seria and Muara. Mails to and from these places are usually conveyed by bus and launch.

An inland airmail service between Brunei Town and Seria, which operates daily from Monday to Saturday was introduced during the year.

In addition to the weekly oversea surface mails, regular and frequent overseas air mail services were maintained. These services provide five airmail despatches per week to and from Brunei, Singapore, Sarawak and North Borneo.

The total number of articles dealt with during the year was 1,460,341, compared with 1,420,304 in 1954 and 1,031,907 in 1953.

CHAPTER XII

PRESS, BROADCASTING, FILMS AND GOVERNMENT INFORMATION SERVICES

Press:

THE local press still consists of the three newspapers THE BORNEO BULLETIN, and the two SALAM British Malayan Petroleum Company papers, one in English and the other in Malay.

These three papers which are issued every Saturday morning, are printed at the Brunei Press, Kuala Belait.

THE BORNEO BULLETIN is a private commercial paper, published by the Brunei Press, and sold at 20 cents per copy. The two SALAM papers are published by the British Malayan Petroleum Company Information Department at Seria, and issued free of charge for the information of its workers. The English edition covers the Company's operations and activities, whilst the Malay edition which is printed in Romanised version covers current local news having public interest. This has proved beneficial to the Malay employees of the Company, as well as to the Malay reading public outside it. All the three papers work closely together.

A normal liaison between the press and the Government Information Department was maintained throughout the year. Apart from the supplying of press releases to them, the Government Information Department also supplied news photos. In many cases unfortunately, the latter offered no maximum exploitation for their use, because of the time delay in preparing blocks for such purpose. Block making had still to be done in Singapore, which meant at least a week lost before any photos could be used.

The Brunei Press, Kuala Belait had made a considerable expansion in 1955. In February, another building was taken over adjacent to the original one on *Jalan Bunga Rambai*, half of which was immediately used as a store room. Additional new machineries had also been introduced which included one flat-bed printing machine, one guillotine knife sharpening machine and a Ludlow type-casting machine. The latter proved to be a great boon in setting the headlines for THE BORNEO BULLETIN and SALAM as well as for other general work.

The proprietor of the Brunei Press was appointed Government Printer by the State Council on 27th October this year. This meant the need for more type-setting equipment, and a reorganisation in some of its departments is now being planned for the near future to meet Government's needs.

The popularity of THE BORNEO BULLETIN, and the SALAM papers could be gauged by the increase in their circulation. According to recent figures, THE BORNEO BULLETIN soared up to 6,450 copies per issue; the English SALAM with 4,600 copies; and the Malay SALAM with 6,000 copies. Last year's figures were 5,500, 3,750 and 4,800 copies respectively.

Broadcasting:

The summary of proposals for the State's five year development included the establishing of a broadcasting station in the State.

During December a representative of Messrs. Marconi's visited the State and conducted a Field Strength Survey in order to ascertain the power of transmitter that will be necessary to give coverage over the whole State. At the same time he made enquiries with a view to establishing a complete organisation, and a draft broadcasting scheme should be ready for laying before the Development Committee early in the new year.

Films:

The Government of Brunei Information Service added three more locally taken 16 mm short subject motion picture films, covering public occasions. Despite the fact that it had no qualified cameraman, the attempt to take motion pictures of local events, for showing to local audiences continued. The three short subject

films were SECRETARY OF STATE FOR THE COLONIES VISITS BRUNEI, HIS HIGHNESS THE SULTAN VISITS ULU BELAIT and HIS HIGHNESS THE SULTAN'S 39TH BIRTHDAY CELEBRATIONS.

As usual the exposed films had to be processed overseas; and the version has still remained silent.

Commercial Cinemas:

Brunei has five commercial cinemas, two in Brunei Town, one in Kuala Belait and two in Seria. One of the two in Seria is operated by the British Malayan Petroleum Company Limited. This was opened early this year, replacing the old open air type.

The influence of modern improvements in motion pictures had steadily benefited the local public audiences. At least one cinema provided the facilities for the showing of Cinemascope and Vista-Vision films.

Types of films shown by the cinemas were of various languages, to cater for the multi-racial groups in the State: English, Malay, Chinese, Hindustani etc. Occasionally, continental films were also shown.

Information Services:

Assistant Information Officer, Pengiran Mohamed Yusuf bin Pengiran Haji Abdul Rahim, who went to the United Kingdom on Government scholarship to take up a year's special course in Public and Social Administration at the South Devon Technical College, Devon, Torquay, returned to Brunei on 6th October. He resumed duty after taking two weeks leave.

The appointment of Editor was filled in November, by an officer from Malaya on a probationary period in the first instance.

Kuala Belait Branch — On 27th June this year, the Kuala Belait Office moved into a new building along *Jalan McKerron*, formerly housing the Immigration Office. The Department is sharing the building with the Education Office and the Belait Lending Library.

Film Shows—The number of GBIS film showings throughout the State had increased over the previous year's figure, at the

same time boosting the audience total. Approximately not less than 90,000 people were reached, and 540 showings were put up. This was made possible by the introduction of new lightweight electric generators, and their uninterrupted operation.

Films used were mainly feature films hired from Singapore, supported by the Gaumont British News, and educational and informational films borrowed from the United States Information Service, Public Relations Office and the Australian Commissioner's Office in Singapore.

A new mobile cinema and public address van of the Land Rover Pick-up type was acquired for Kuala Belait. An outboard boat for the ulu *GBIS* film showings was also purchased.

A total of 88 reels of films were added to the Films Library during the year, bringing the grand total to 501 reels altogether. These films comprised mostly those from the Malayan Film Unit, and the Gaumont British News from the Central Office of Information, London. Apart from these, films of educational and informational value were also added.

Reading Room — The Reading Room in Kuala Belait moved into a new building (see under Kuala Belait Branch). About 7,000 persons of different nationalities made use of the facilities.

A portion of the Reading Room in Brunei Town office was taken up to accommodate the extra space required for the general office. An estimated 7,800 persons visited this place during the year.

Photography — Photographs were taken during the year, and relevant copies of these were supplied to the press. Sets of these pictures were also displayed at both Reading Rooms with suitable captions.

The appointment of a photographer was still vacant. All processings therefore, had still to be done by commerical photo studio.

A small darkroom was built adjoining the workshops, in the Brunei Town office in the anticipation of doing our own photographic processings.

PART III.

CHAPTER I

GEOGRAPHY

BRUNEI is a State on the north-west coast of Borneo, lying between latitude $4^{\circ} 2''$ and $5^{\circ} 3''$ north and longitude $114^{\circ} 4''$ and $115^{\circ} 22''$ east. It forms two enclaves into the territory of Sarawak, by which it is bounded on all sides, or perhaps it would be more correct to say, historically speaking, than an intrusion of Sarawak formed by the basin of the Limbang river splits the State into separate parts. It comprises of an area of some 2,226 square miles, and has a coast line of about one hundred miles extending from Brunei Bay in the East to the boundary with Sarawak in the West.

The capital of the same name, or to give it its honorific Arabic title, Daru'l Salam (Abode of Peace) is situated on the Brunei River, about nine miles from its mouth and is distant by sea 759 nautical miles from Singapore. At the time of the last census in 1947 it had a population of 10,620. Prior to 1910 the town consisted entirely of Malay houses built on *nibong* piles on mud flats on the river, but it has now spread over a portion of the mainland, partly reclaimed, on which the Government offices and other public buildings and streets of shophouses have been built.

Set in a wide sweep of the river, this river town is in its way unique. At high tide under favourable conditions of light it takes on a quite remarkable beauty; viewed at close quarters it is even more remarkably ramshackle. The houses are grouped together in small villages, many being connected by precarious bridges, and there the inhabitants carry on their multifarious activities in much the same way as if they were on land. The only other town of any size is Kuala Belait at the south-western end of the State's sea-board with a population about 5,000. In the Seria area, which is the centre of a rapidly expanding oil producing district and the local headquarters of the British Malayan Petroleum Company, the population is approximately 12,000. At Kuala Belait with

municipal services, piped water supply, electric light, domestic gas, cold storage, cinemas and other amenities, it is difficult to realise that within living memory it has been the scene of human sacrifices and that only two hours upriver there are *pagan* tribes treasuring the grisly relics of head-hunting expeditions of not so long ago.

Climate:

The climate is of the tropical type and is characterised by uniform temperature, high humidity and copious rainfall. The heat is usually tempered by a slight breeze and the temperature rarely exceeds 90°F; the usual daily range is between 76° and 86°F.

The annual rainfall varies from 100 inches at the coast to over 200 inches in certain parts of the interior. There are no well defined seasons, but the rainfall tends to be heaviest from October to the middle of January during the period of the Northeast monsoon.

Local standard time is eight hours ahead of Greenwich time (meridian 120°E.). As the mean longitude of the State is roughly 115°E. there is a sort of natural daylight saving of about twenty minutes.

CHAPTER II

HISTORY

THE native name for the island of Borneo has always been Pulau Kalimantan, but a Mercator's chart of 1595 gives to the town of Brunei as well as the whole island, the name of "Borneo". Early writers spell the name of the island variously, Brunei, Brunnai, Brune, Borneo, Borney, Bornei, Borne and Burni; from these variations upon the theme of one word, two words eventually crystallised — "Brunei" and "Borneo". As recently as 100 years ago, Brunei territory was always referred to as "Borneo Proper". The fact is that at the time of the earliest cartographers and writers, the kingdom of Brunei was at its zenith; the terms "Brunei" and "Borneo" were synonymous and the whole island was subject to the dominion of Brunei.

Brunei has no discovered pre-history and no established early history, and the meagre written records do not go further back than the first Mohammedan Sultan, contemporaneous with the introduction of the Arabic script in or about the fifteenth century. For records of the pre-Muslim era we have to turn to Hindu and Chinese chroniclers. Chinese annals of the sixth and seventh centuries contain reference to a kingdom known as Poli or Puni which sent tribute to the Emperors of China in A.D. 518, 523 and 616. Similar references to a state of that name 45 days' sail from Java occur in the annals of the Sung dynasty which ruled over South China from about 960 to 1280 A.D., and there are strong grounds for identifying it with Brunei, though the authorities are not unanimous on this point. With the decline of the Sung dynasty Brunei transferred its allegiance to Hindu Majapahit in Java, then back again to China, and finally at the end of the fourteenth century, paid tribute to Mohammedan Malacca. With the coming of the Ming Emperors the ties with vassal states were strengthened and tributes were sent to China several times between 1405 and 1425. Thereafter there is no record.

Brunei must soon have thrown off all allegiance for by the early years of the sixteenth century it had risen to great power, and one of its rulers, Sultan Bolkiah, or Nakhoda Ragam (the Singing Captain) a renowned sea rover, voyaged to Java and Malacca and made conquests in Borneo, the Philippines and Sulu and even seized Manila. The names of many islands scattered throughout the archipelago are alleged to commemorate the circumstances of his voyages. One legend is that he set out on a cruise with a *gantang* of pepper seeds and was not content to return until he had given to each seed the name of one of the myriad islands encountered. His wife was a Javanese princess whose followers intermarried with the people of Brunei, and such, according to one tradition, is the origin of the Kedayans whom custom associates with the main bodyguard of the Sultan and who introduced in Brunei a system of rice cultivation greatly superior to local standards. It is related that in his declining years he carried with him on his exploits a band of artisans whose duty it was to prepare royal tombs in remote parts of the archipelago, it being his wish should he die at sea to be buried at the nearest site, the finest of these is said to contain his remains at Kota Batu, about 1½ miles downstream from Brunei Town. This tomb of exquisite workmanship in hard basaltic stone was damaged by Spanish round shot in the seventeenth century and is now in a sorry state of dilapidation and the engravings upon it remain a secret to posterity.

This was the golden age of Brunei. Her sovereignty extended over the whole island of Borneo, the sultanates of Sambas, Pontianak, Banjarmasin, Pasir Kotei and Bolongan being her vassals, as well as over the Sulu archipelago and over the islands of Balabac, Banggi, Balambagan and Palawan.

It was probably during the lifetime of Sultan Bolkiah that Pigafetta, the Italian historian of Magellan's voyage around the world, visited Brunei and wrote the first eye-witness account in which he bore evidence as to the splendour of the Court and the size of the town of Brunei, the population of which he estimated at 25,000 families.

Kublai Khan, the Mongol Conqueror, is known to have sent an expedition from China to the eastern archipelago in 1292 and it is more than probable that this was the origin of the Chinese

colony in northern Borneo which is commemorated in the nomenclature of Kinabatangan river and the mountain Kinabalu and which according to tradition provided Brunei with an early ruler.

In 1291, according to Marco Polo there was a considerable junk carried trade between Brunei and China.

In Brunei, the traditional ceremony, the royal procedure and the nomenclature of officers of State, all commemorate Hindu and Chinese influences. The Hindu influence emanated from the Empire of Majapahit in Java and according to Javanese records a force expelled Sulu marauders from Brunei in 1368 and Brunei is mentioned as one of the countries conquered during the reign of the Angka Wijaya who was the last king to reign over Majapahit before it was vanquished by Mohammedan Malacca.

The Portuguese visited Brunei in 1526 and confirmed the glowing account of Pigafetta. Further visits were paid by the Portuguese until 1530, and a trading factory and a Catholic mission were established at the beginning of the next century. Spain, too, having possession of the Philippines, evinced an active interest in Brunei affairs and twice attacked the capital. Later the English and Dutch in turn made sporadic appearance.

Towards the end of the sixteenth century the power of Brunei began to decline and the outlying territories gradually fall away. The Dutch, having established trading stations on the Southwest, South and East of Borneo rapidly extended their sphere of influence over the semi-independent but nominally vassal sultanates. This disintegration continued until by the beginning of the nineteenth century the Kingdom of Brunei had so dwindled in extent as to include only what is now Sarawak and part of North Borneo.

At this period the capital itself seems to have degenerated to the condition of a slave market for the sale of captives of Illanun and Sulu pirates. Anarchy was rife in the outlying districts and in 1841, in return for his services in assisting the Bendahara Raja Muda Hashim, Viceroy of Sarawak, to quell an insurrection at Kuching, Sarawak proper was ceded to Mr. James (later Sir James) Brooke, who was proclaimed Rajah of Sarawak. In 1846 the island of Labuan was ceded to Great Britain as a base for anti-piracy measures and for the watering and careening of ships, and in 1877 the whole of the northern portion of Borneo

was ceded to form the nucleus of what was to become British North Borneo. At various later dates further cessions were made to the Rajah of Sarawak and to the British North Borneo Company till the territories of the State were eventually reduced to their present circumscribed limits.

In 1847 the Sultan entered into a treaty with Great Britain for the furtherance of commercial relations and the mutual suppression of piracy with an additional clause providing for extra-territorial jurisdiction over British subjects in Brunei, which provision was modified by the Agreement in 1856. By a further treaty made in 1888 Brunei was placed under the protection of Great Britain, and the Sultan agreed that the foreign relation of the State should be conducted by Her Britannic Majesty's Government. Provision was also made for the setting up of consular courts with jurisdiction over British subjects and foreign subjects enjoying British protection. In 1906 a supplementary agreement was entered into whereby the Sultan undertook to accept a British Officer to be styled Resident, who should be the agent and representative of the British Government under the High Commissioner for the Malay States.‡

The years between 1906 and 1941 were years of steady progress. Very shortly after the treaty a form of Government was set up under the Sultan in Council and the British Resident, and law and order was established. Roads were built, people were encouraged to become agriculturists and fishermen according to their way of life. Conditions of housing were improved and trade flourished. The discovery of a workable oilfield at Seria only 10 miles from Kuala Belait in 1929 gave added importance to the State and its revenue increased and Brunei became prosperous.

Period of Japanese Occupation:

In the early morning of 16th December, 1941, the first wave of Japanese Forces landed at Kuala Belait and occupied the oil-fields at Seria. Six days later on 22nd December, Brunei Town was occupied and all the British Government Officials were interned. Almost immediately the Japanese introduced their East Asia Co-Prosperity policy, but it had a bad effect on the people's morale when public thrashing had to be attended and later the

‡The treaties and agreements relating to events described in this and the preceding paragraph were published as appendices to the *Annual Report* for 1946.

Japanese dropped that policy to a certain extent. People living near Kuala Belait were driven to work in the oilfields and the country folk were forcibly made to grow food.

Trade, of course, came to a standstill and only certain shopkeepers were allowed to remain as distributors. Luckily for the native population the Government in the years immediately preceding the outbreak of war had compelled traders to import large stocks of rice, the staple food, in case the European war disrupted shipping in the Far East. As a result of that policy the population had ample food for the first year and only slightly less in the second year, but by the end of 1943 the stocks had been used up and only a trickle of food was able to enter the country owing to Japanese shipping losses. Even the Japanese themselves lacked food, but not for long. As soon as the local harvest was in the majority of it was confiscated to feed the Japanese Forces and a serious state of starvation prevailed. Medicines were almost non-existent, malaria spread and the resistance of the population to disease was broken down.

The Japanese policy seems to have been one of neglect. No anti-malarial work was done and no maintenance of houses, roads, ditches or water transport was even contemplated.

In 1944 the Allied Air Force began to take an active interest in Brunei. There were almost daily raids somewhere in the State and later the main town areas were destroyed by bombing. All the shophouses were destroyed in Kuala Belait and Brunei Town and in the latter town the newly completed hospital with X-ray equipment was literally blown off the face of the earth. Luckily the famous River Kampong was spared but many houses have scars of machine gun bullets to bear witness to those frightful days. Most of the native population went into the interior to look for a piece of land to cultivate and live on until the coming of the Allied Forces.

Allied Re-Occupation:

On 10th June 1945, the Allied Forces landed at Muara and proceeded towards Brunei which they entered easily, having only encountered small activity. The Japanese in the meantime were busily destroying their installations in setting fire to the oilfields at Seria. Realising that the end had come the Japanese took out all

the civilians imprisoned for suspected anti-Japanese activities and executed them in their usual cowardly fashion. Their forces then moved upcountry and into the interior where many of them met untimely ends at the hands of the *Dyaks*.

Almost immediately a system of Government was set up under British control and so began the era of reconstruction under the British Military Administration. The population was found to be in a shocking state of health and it is no exaggeration to state that if the landing had not taken place when it did thousands of people would soon have perished through starvation and disease.

Free food and clothing were distributed as quickly as possible to the whole population and the sick were taken to hospital. Those Government servants who were still capable of work reported for duty and the gaps were filled by many wellknown members of the various communities.

Distribution of supplies was difficult because Japanese had allowed the roads to revert to jungle and grass was growing on many of the roads in the town area. Water transport was scrapped together from old hulls and Japanese engines were put into them. Rubble had to be cleared away in the town, bomb-crafters filled in and roads rehabilitated.

Temporary shophouses were built along the river bank and partly over the water from the beginning of *Jalan Stoney* up towards the Customs Wharf until such time as the shop area could be cleared and drained.

Gradually the health of the population improved and order was restored to something like normal. Trade began again though very slowly and prices, other than those goods distributed from the Supply Depot, were prohibitive at first.

On 6th July, 1946, the Government of the country was formally handed over to the Civil Authorities.

CHAPTER III

ADMINISTRATION

BRUNEI is a sultanate. The present Ruler, the twenty-eighth of his line, His Highness Sir Omar Ali Saifuddin, K.C.M.G., was born on 23rd September, 1916, and succeeded to the throne, on the death of his elder brother, on the 6th June, 1950.

The supreme authority in the State is vested in the Sultan in Council. The State Council consists of twelve members, including the British Resident with the Sultan as President. The assent of the Council required for the enactment of legislation and important questions of policy are referred to it. The following is a list of members of State Council during the year:—

His Highness the Sultan Sir Omar Ali Saifuddin Wasa'dul Khairi Waddin ibni Almerhom Sultan Sir Mohamed Jemal-ul Alam, D.K., S.P.M.G., K.C.M.G.

The British Resident Mr. J. O. Gilbert.

Duli Pengiran Bendahara Muda Hashim ibni Almerhom Pengiran Anak Abdul Rahman.

Duli Pengiran Pemancha Anak Haji Mohamed Alam ibni Almerhom Pengiran Anak Abdul Rahman, D.K.

Pengiran Maharaja Laila Anak Kahar ibni Almerhom Pengiran Haji Mohamed Yassin, S.M.B.

Pengiran Kerma Indra Mohamed bin Pengiran Piut, M.B.E.

Pengiran Haji Mohamed Salleh ibni Pengiran Haji Mohamed, S.M.B.

Pehin Dato Perdana Mentri Haji Ibrahim bin Mohamed Ja'afar, D.K., O.B.E.

Pehin Orang Kaya Di-Gadong Awang Haji Mohamed Yussof bin Jawatan Dalam.

Mr. E. W. Cousens.

Mr. R. E. Hales.

Mr. George Newn Ah Foott.

The general functions of administration are carried out by a British Resident under the supervision of the Governor of Sarawak as High Commissioner. By a Treaty of 1906 the Resident's advice must be asked and acted upon in all questions other than those affecting the Mohammedan religion. The seat of Government is in Brunei Town and there are Assistant Residents at Kuala Belait and at Headquarters.

The State is divided into four administrative districts, namely, Brunei and Muara, Temburong, Tutong and Belait, in each of which there are Malay District Officers who are responsible to the Resident.

At Brunei, Tutong and Kuala Belait there are Sanitary Boards whose members, of all nationalities, are appointed by Government. They are responsible for sanitation, conservancy, street lighting, rating and other municipal matters within their respective areas.

Government continues to control the distribution of commodities such as rice and sugar. For this purpose there are Supply Depots in Brunei Town and Kuala Belait, and prices are strictly controlled.

CHAPTER IV

WEIGHTS AND MEASURES

BOTH English and local weights and measures are used. The legal standard weights and measures from which all others are ascertained are the Imperial yard, the Imperial pound and the Imperial gallon.

The following are the principal local weights and measures and their English equivalents:—

The *chupak* equal to 1 quart.

The *gantang* equal to 1 gallon.

The *tahil* equal to $1\frac{1}{3}$ ozs.

The *kati* (16 *tahils*) equal to $1\frac{1}{3}$ lbs.

The *pikul* (100 *katis*) equal to $133\frac{1}{3}$ lbs.

The *koyan* (40 *pikuls*) equal to $5,333\frac{1}{3}$ lbs.

APPENDIX

APPENDIX "A"

TABLE SHOWING QUANTITY AND VALUE OF IMPORTS FOR YEARS 1954 AND 1955

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
001	Live animals, chiefly for food	heads	39,016	\$ 1,004,016	43,737	\$ 1,677,036
011	Meat; fresh, chilled or frozen	lbs.	302,150	377,063	287,883	402,001
012	Meat; dried, salted or smoked (not canned)	"	382,894	772,959	511,236	1,004,432
013	Meat; canned, and meat preparations, canned and not canned	"	309,553	648,545	453,713	1,078,624
021	Milk; and cream; fresh	"	—	—	—	—
022	Milk and cream evaporated, condensed or dried	"	1,582,201	1,087,287	1,452,198	1,006,471
023	Butter	"	204,616	341,875	158,088	310,414
024	Cheese	"	35,073	57,961	46,685	83,186
025	Eggs	pcs.	1,262,015	399,081	1,431,651	305,243
026	Natural honey	lbs.	2,050	2,091	2,032	2,378
029	Miscellaneous dairy products	—	—	396,464	—	685,372
031	Fish; fresh or simply preserved	pkl.	2,549	279,046	3,385	340,521
032	Fish canned and fish preparations	lbs.	341,095	447,659	528,686	651,315
041	Wheat unmilled	pkl.	53,629	1,737,813	25,198	738,092
042	Rice	"	—	—	—	—
043	Barley, unmilled	"	—	—	—	331,017
044	Maize (corn), unmilled	"	—	314,603	—	—
045	Cereals unmilled, other than wheat, rice, barley and maize	"	—	—	—	—
046	Flour	lbs.	1,450,552	315,155	2,140,017	513,064
047	Cereals milled, except wheat flour	"	—	1,845	—	2,836
048	Cereal preparations	pkl.	—	769,960	—	856,050
051	Fruits and nuts, fresh (not including oilnuts)	"	—	409,548	—	687,477
053	Fruits preserved and fruit preparations	lbs.	—	336,085	—	397,006

Group No.	Heading	Unit	1954		1955	
			Quantity	Value \$	Quantity	Value \$
054	Fresh and dry vegetables, roots and tubers, not including artificially dehydrated	pkl.	—	800,153	—	798,975
055	Vegetables, preserved and vegetable preparations	lbs.	—	309,186	—	163,179
061	Sugar	"	4,162,722	918,141	5,136,573	1,031,647
062	Sugar preparations	"	—	409,087	—	595,785
071	Coffee	"	157,278	302,587	233,606	311,202
072	Cocoa	"	10,130	15,957	5,935	9,161
073	Chocolate preparations	"	—	420,394	—	573,699
074	Tea and mate	"	67,640	176,731	69,751	249,482
075	Spices	"	—	139,941	—	115,300
081	Feeding stuff for animals not including unmilled cereals	"	—	472,124	—	442,751
091	Miscellaneous food preparations	pkl.	—	642,528	—	753,225
099	Miscellaneous food preparations, n.e.s.	lbs.	—	630,825	—	716,907
111	Water and non-alcoholic beverages	gls.	—	190,802	—	229,709
112	Alcoholic beverages	"	415,980	1,782,371	310,158	1,514,987
121	Tobacco unmanufactured	lbs.	—	—	—	—
122	Tobacco manufactured	"	386,464	2,249,442	346,758	2,085,936
211	Hides and skins (except fur skins) undressed	pkl.	—	5,091	—	190
212	Fur skins undressed	"	—	—	—	—
221	Oilseeds, oilnuts and oil kernels	pkl.	—	68,342	—	27,195
231	Crude rubber, including synthetic and reclaimed	lbs.	—	—	—	2,152
241	Fuelwood and charcoal	—	—	3,338	—	—
242	Wood in the round	ton	—	—	—	18,465
243	Wood shaped or simply worked	"	10,233	1,248,550	16,818	1,034,347
244	Cork, raw	pkl.	—	—	—	—
251	Pulp and waste paper	"	—	17,081	—	27,992

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
				\$		\$
261	Silk	—	—	—	—	—
262	Wool and other animal hair	—	—	—	—	—
263	Cotton	—	—	147,301	—	197,607
264	Jute	—	—	15,081	—	—
265	Vegetable fibres except cotton and jute	—	—	92,463	—	78,830
266	Synthetic fibres	—	—	—	—	—
267	Waste materials from textile fabrics	—	—	33,170	—	21,995
271	Fertilizers, crude	lbs.	—	2,205	—	—
272	Crude minerals, excluding coal, petroleum fertilizer materials and precious stones	—	—	784,012	—	136,914
281	Iron ore	ton	—	—	—	—
282	Iron and steel scrap	—	—	—	—	—
283	Ore of non-ferrous base metals and concentrates	"	—	—	—	8,131
284	Non-ferrous metal scrap	"	—	—	—	—
285	Silver and platinum	"	—	—	—	—
291	Crude animal materials, inedible, n.e.s.	—	—	—	—	960
292	Crude vegetable materials, inedible, n.e.s.	—	—	—	—	—
311	Coal, coke and briquettes	—	—	—	—	—
312	Petroleum, crude and partly refined	gls.	—	—	—	—
313	Petroleum products	"	—	—	—	—
314	Gas, natural and manufactured	cu. ft.	6,031,102	6,106,411	2,014,412	2,770,990
315	Electric energy	—	—	41,478	—	50,060
411	Animal oils and fats	pkl.	—	2,470	—	7,448
412	Vegetable oils	pkl.	—	971,536	—	1,128,165
413	Oils and fats processed, and waxes of animal or vegetable origin	"	—	94	—	4,362

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
				\$		\$
511	Inorganic chemicals	lbs.	—	1,310,536	—	862,156
512	Organic chemicals	—	—	4,582	—	42,092
521	Mineral tar and crude chemicals from coal, petroleum and natural gas	—	—	145,256	—	154,170
531	Coal tar and dyes	—	—	8,558	—	—
532	Dyeing and tanning extracts and synthetic tanning materials	—	—	—	—	—
533	Pigments, paints, varnishes and related materials	—	—	1,041,836	—	750,314
541	Medicated and pharmaceutical products	—	—	728,514	—	839,819
551	Essential oils, perfume and flavouring materials	—	—	—	—	—
552	Perfumery, cosmetics, soaps and cleansing and polishing preparations	—	—	412,864	—	404,504
561	Fertilizers, manufactured	—	—	3,305	—	2,387
591	Explosives	rds./pes.	—	155,134	—	399,525
599	Miscellaneous chemicals materials products	—	—	3,720	—	330,620
611	Leather	pkl.	—	4,713	—	2,225
612	Manufactures of leather, n.e.s.	—	—	53,605	—	39,340
613	Furs, dressed or dressed and dyed	—	—	—	—	—
621	Rubber fabricated materials	—	—	90,531	—	180,485
629	Rubber manufactured articles, n.e.s.	pes.	—	552,151	—	553,585
631	Veneers, plywood boards, etc.	—	—	38,310	—	41,202
632	Wood manufactures, n.e.s.	—	—	—	—	16,552
633	Cork manufactured	—	—	—	—	1,784
641	Paper and paperboard	pkl.	—	665,940	—	746,777
642	Articles made of pulp, paper of paperboard	—	—	320,463	—	454,788
651	Textile yarn and thread	lbs.	—	25,091	—	15,201

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
				\$		\$
652	Cotton fabrics of standard type	yds.	1,121,235	853,470	1,087,223	835,389
653	Textile fabrics of standard type, other than cotton fabrics	"	235,963	250,274	184,954	163,814
654	Tulle, lace, embroidery, ribbons, trimmings and other smallwares	—	—	—	—	57,815
655	Special textile fabrics and related products	—	—	183,765	—	217,565
656	Made-up articles wholly or chiefly of textile materials, n.e.s.	—	—	772,942	—	503,422
657	Floor coverings and tapestries	pcs.	—	11,815	—	25,267
661	Lime, cement and fabricated building materials except glass and clay materials	ton	—	1,827,068	—	1,739,143
662	Clay construction materials and refractory construction materials	—	—	344,450	—	607,440
663	Mineral manufactures, n.e.s. not including clay and glass	—	—	357,730	—	453,714
664	Glass	—	—	246,480	—	241,068
665	Glassware	—	—	241,596	—	270,661
666	Pottery	—	—	183,177	—	195,491
671	Silver and platinum group metals	—	—	7,271	—	12,914
672	Precious and semi-precious stones and pearls unworked and worked	—	—	—	—	174
673	Jewellery and goldsmiths' & silversmiths' wares	—	—	328,910	—	655,999
681	Iron and steel	—	—	11,688,880	—	10,119,841
682	Copper	—	—	37,701	—	29,845
683	Nickel	—	—	7,245	—	—
684	Aluminium	—	—	46,206	—	68,669
685	Lead	—	—	3,385	—	2,981

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
686	Zinc	—	—	\$ 204,762	—	\$ 204,237
687	Tin	—	—	—	—	—
689	Miscellaneous non-ferrous base metals employed in metallurgy	—	—	—	—	—
691	Ordnance	pcs.	212	30,252	190	21,423
699	Manufactures of metals, n.e.s.	—	—	23,150	—	2,263,456
711	Power generating (except electric) machinery	—	—	6,666,116	—	2,950,409
712	Agricultural machinery and implements	—	—	4,337,685	—	87,041
713	Tractors other than steam	—	—	61,659	—	730,441
714	Office machinery	—	—	361,916	—	59,906
715	Metalworking machinery	—	—	193,434	—	1,203
716	Mining construction and other industrial machinery	—	—	—	—	—
721	Electric machinery apparatus and appliances	—	—	10,607,820	—	9,155,024
731	Railway vehicles	—	—	2,802,400	—	2,650,666
732	Road motor vehicles	—	—	25,317	—	26,633
733	Road motor vehicles other than motor vehicles	—	—	7,256,463	—	4,790,514
734	Aircrafts	—	—	383,270	—	562,890
735	Ships and Boats	—	—	496,362	—	647,866
811	Prefabricated building & their assembled parts	—	—	1,367,700	—	90,466
812	Sanitary, plumbing, heating and lighting fixtures and fittings	—	—	1,077,858	—	700,991
821	Furniture and fixtures	—	—	173,380	—	150,852
831	Travel goods and handbags, etc.	—	—	1,226,850	—	520,715
841	Clothing except fur clothing	—	—	47,287	—	—
842	Fur clothing	—	—	521,623	—	434,621

APPENDIX "A"—(Contd.)

Group No.	Heading	Unit	1954		1955	
			Quantity	Value	Quantity	Value
851	Footwear	prs.	127,916	\$ 384,787	129,349	\$ 382,471
861	Scientific, medicals, optical, etc., instruments ...	—	—	663,238	—	259,355
862	Photographic and cinematographic supplies ...	—	—	118,024	—	110,338
863	Exposed cinematographic films ...	rls.	10,753	10,456,761	12,969	14,843,650
864	Watches and clocks	—	—	221,822	—	453,835
891	Musical instruments, phonograph & phonograph records	—	—	105,231	—	102,401
892	Printed matter	—	—	175,220	—	287,406
899	Manufactured articles, n.e.s.	—	—	2,225,570	—	2,354,860
911	Postal packages	—	—	—	—	—
921	Live animals other than for food	hds.	71	848	—	640
931	Returned goods and special transactions	—	—	3,616	—	119,554
	Notes	—	—	11,730,000	—	11,130,000
	Coins	—	—	55,500	—	107,500
	Gold	tahils	—	103,888	—	155,659
	Beacon's spotlight and spares	—	—	—	—	25,549
				111,666,394		104,621,593
	Re-exports			14,030,318		10,976,613

APPENDIX "B"
TABLE SHOWING THE QUANTITY AND VALUE OF PRINCIPAL EXPORTS FOR YEARS 1954 AND 1955

<i>Heading</i>	<i>Unit</i>	<i>1954</i>		<i>1955</i>	
		<i>Quantity</i>	<i>Value</i>	<i>Quantity</i>	<i>Value</i>
Crude oil	Long Ton	4,704,488	\$ 262,206,468	5,108,970	\$ 286,920,405
Firewood, mangrove	Ton	11,518	172,678	7,455	104,340
Jelutong rubber	Ton	161	311,760	191	360,664
Natural gas	1000 cu. ft.	2,353,826	588,458	2,617,359	654,364
Plantation rubber	Pound	1,995,026	1,180,896	3,229,151	3,569,958
			264,460,260		291,609,731

APPENDIX "C"

GLOSSARY OF VERNACULAR NAMES AND TERMS

Atap (leaf)	Roofing material made from palm leaves.
Ayer	Water.
Bapa	Father.
Belian	Borneo Ironwood.
Belukar	Secondary forest after shifting cultivation.
Billis	Anchovy.
Bubus	Fish traps.
Bukit	Hill.
Damar	Rasin, obtained mainly from Dipterocarpaceae.
Getah	Rubber, latex.
Gula apong	Sugar obtained from the Nipah palm.
Hari	day.
Ibu	Mother.
Inche	Mister.
Istana	Residence of royalty.
Jalan	Road.
Jelutong	<i>Dyrea</i> spp. The latex is the principal ingredient in chewing gum.
Kajang	Matting made from leaves, used as walling or roofing material.
Kampong	Village.
Kapur paya	<i>Dryobalanops rappa</i> Becc. Medium hardwood considered inferior to the hill kapurs.
Ketua	Headman.
Kilongs	Fish traps made from bamboo.
Mata	Eye.
Mengkuang	Larger screwpine
Meranti	<i>Shorea</i> spp. Light hardwood.
Nibong	<i>Oncosperma filamentosa</i> Bl., a common palm producing a useful wood.
Nipah	<i>Nipa fruticans</i> Wurmb.; a palm common along the tidal reaches of rivers, and in mangrove swamps.
Padang	Field
Pandan	Smaller screwpine generally used for fine matwork.
Perahus	Dug-out boat.
Pikul	133½ lbs. weight.
Puteh	White.
Rambat	Casting net.
Ramin	<i>Gonystylus bancanus</i> (Miq) Kurz; light hardwood.
Resak	<i>Cotylelobium</i> and <i>Vatica</i> spp.; heavy and medium hardwood.

APPENDIX "C"—(Contd.)

Rumbia	<i>Metroxylon sagus</i> Rothb.; the sago palm.
Samsu	Arrack.
Selangan Batu	<i>Shorea</i> spp.; heavy hardwoods.
Seringawan	<i>Shorea albida</i> Sym.; a heavy red meranti.
Seringawan var bunga	A light variety of <i>seringawan</i>
Semayor	<i>Shorea inaequilateralis</i> Sym.; heavy hardwood.
Sungel	Stream.
Tikar	Woven mat of split material.
Tongkang	Large shallow-draft barge-like sea-going cargo-boat.
Towkay	Merchant.
Tugu	A kind of fish trap.
Ulu	Upper reaches of a river.

APPENDIX "D"

RAINFALL IN INCHES FOR VARIOUS STATIONS IN BRUNEI STATE, 1955

<i>Month</i>	<i>Brunei Town</i>	<i>Tutong</i>	<i>Kuala Belait</i>	<i>Tem- burong</i>	<i>Kilanas</i>	<i>Birau</i>
January	14.31	10.30	11.41	12.85	14.84	5.28
February	3.17	1.72	6.16	12.39	5.21	2.09
March	4.07	5.67	3.65	2.27	1.78	1.00
April	4.31	6.89	6.11	14.46	4.91	4.21
May	4.04	4.29	8.73	.22	5.69	5.30
June	15.21	13.38	10.09	12.98	13.52	12.10
July	8.54	4.30	4.15	17.19	8.65	7.11
August	9.28	12.20	13.47	25.08	11.82	10.82
September	12.40	14.39	21.43	17.27	14.30	13.40
October	14.58	9.77	13.85	18.76	15.16	1.95
November	14.96	13.82	11.71	27.77	17.60	19.71
December	10.16	16.43	21.76	15.39	13.24	10.13
Total 1955	115.03	113.16	132.52	176.63	126.72	93.10

PREVIOUS RECORDS (ANNUAL TOTALS) COMPARED WITH 1955

<i>Station</i>	<i>1950</i>	<i>1951</i>	<i>1952</i>	<i>1953</i>	<i>1954</i>	<i>1955</i>
Brunei Town	91.49	124.35	104.40	84.28	109.53	115.03
Tutong	—	94.01	117.94	80.46	116.74	113.16
Kuala Belait	—	122.16	129.11	114.18	136.20	132.52
Kilanas	104.57	107.30	113.11	97.63	110.22	126.72
Birau	77.52	110.22	122.93	70.30	84.99	93.10

APPENDIX "E"

AREA IN ACRES OF CONSTITUTED AND PROPOSED FOREST RESERVES ON 31ST DECEMBER 1955

District	Name of Reserve	Finally Constituted Reserves			Proposed Reserves Preliminarily Notified	Number of Notification
		Area on 1.1.55	Added during 1955	Excluded during 1955		
Belait	Labi Hills	263,000	—	—	—	—
Belait	Anduki	2,264	—	—	—	—
Belait	Badas	65	—	—	—	—
Belait	Forest Nursery	27	—	—	—	—
Belait & Tutong	Andulau	30,690	—	—	—	—
Tutong	Ladan Hills	84,000	—	—	—	—
Brunei	Berakas	560	—	—	860*	186/1955
Temburong	Batu Apoi	188,500	—	—	—	—
Temburong	Selirong	6,175	—	—	—	—
Temburong	Labu	22,200	—	—	—	—
Temburong	Peradayan	2,650	—	—	—	—
		600,131				600,131

*Includes part of the existing Berakas forest reserve and an extension thereto.

APPENDIX "F"

STATEMENT IN MILES OF DEMARCATION AND MAINTENANCE OF EXTERNAL BOUNDARIES

Forest Reserve	Length of boundary			Upkept during 1955			Remarks
	Rentis	Other demar- cated boundary	Undemar- cated	Total	Rentis	Other demar- cated	
Labi Hills	16½	50½	58½	126	—	—	By forest labourers in October.
Badas	2	—	—	2	—	—	
Anduki	6½	6½	2½	15½	—	—	
Andulau	37	—	—	37	1½	—	
Ladan Hills	36	—	40	76	—	—	By forest labourers in March.
Batu Apoi	3	—	91	94	3	—	
Selirong	—	14	—	14	—	—	4½ miles new rentis cut as provisional bound- ary for new Berakas F.R.
Berakas	4½	—	—	4½	—	—	
Forest Nursery	1	—	—	1	—	—	By forest labourers in March.
Labu	8	—	25	33	5½	—	
Peradayan	4½	—	3½	8½	—	—	
Total	118½	71	180½	370½	9½	—	

NOTE:— "Other demarcated boundary" means features such as roads and streams, demarcated by Forest Reserve notice plates, which require periodic inspection.

APPENDIX "G"

OUTTURN IN SOLID CUBIC FEET OF TIMBER AND FUEL UNDER LICENCES & PERMITS DURING 1955.

Forests	Heavy round	Hardwood sawn	Other round	Timber sawn	Total round	Timber sawn	Poles mangrove	other	Firewood mangrove	other	Charcoal	Boats
A. Forest reserves	3,083	6,300	144,019	122,262	147,102	128,562	21,221	—	314,232	—	38,844	—
B. Other reserves	4,366	55,596	419,744	58,255	424,110	113,851	26,109	4,417	81,888	62,371	—	6,670
									9,478 (B.M.P. Co.)			
	7,449	61,896	563,763	180,517	571,212	242,413	47,330	13,895	396,120	62,371	38,844	6,670

APPENDIX "H"

OUTTURN OF MINOR PRODUCE UNDER LICENCES DURING 1955

Forests	Getah Pikuls	Jelutong	Bamboos	Damar	Nibong	Rotan	Tikar & Kelang	Atap Nipah	Gula Apang	Misc.	Total
A. Forest reserves	719	6,128	—	—	—	—	—	—	—	—	6,128
B. Other Forest	2,971	33,509	20	—	655	123	557	393	—	74	38,302
	3,690	39,637	20	—	655	123	557	393	—	74	44,430

APPENDIX "I"
STATEMENT OF REVENUE WHOLE STATE (BY DISTRICT)
(Forest Department)

<i>District</i>	<i>Timber & Poles \$</i>	<i>Firewood & Charcoal \$</i>	<i>Minor Forest Produce \$</i>	<i>Other Source \$</i>	<i>Compensation and fines \$</i>	<i>Total \$</i>
Brunei	3,869.89	10,622.98	8,985.70	1.00	—	23,479.57
Tutong	13,330.22	2,470.51	2,668.88	13.00	—	18,482.61
Belait	47,843.63	36.20	29,689.53	88.00	—	77,657.36
Temburong	595.29	133.50	16.30	77.00	—	882.09
Total	65,639.03	13,263.19	41,360.41	179.00	—	120,441.63

APPENDIX "J"
EXPENDITURE OF WHOLE STATE 1955

<i>Personal Emoluments</i>	<i>Annually Recurrent</i>	<i>Special Expenditure</i>	<i>Total</i>
\$72,095.77	\$25,832.07	\$6,803.29	\$104,731.13

APPENDIX "K"

CRIME STATISTICS FOR THE YEAR 1955

1. *Seizable Offences—Penal Code*

True Reports	...	...	...	...	...	323
Manslaughter	...	...	...	...	...	3
House Breaking	...	...	...	...	...	15
Thefts	...	...	...	...	...	202
Criminal Trespass	...	...	...	...	...	22
Dangerous Driving	...	...	...	...	...	4
Other Offences	...	...	...	...	...	90
Convictions	...	...	...	...	...	88
Acquittals	...	...	...	...	...	5
Undetected	...	...	...	...	...	119
Pending	...	...	...	...	...	24

2. *Non-Seizable offences—Penal Code*

True Reports	...	...	...	...	...	343
Assaults	...	...	...	...	...	259
Mischiefs	...	...	...	...	...	29
Other Offences	...	...	...	...	...	55
Convictions	...	...	...	...	...	62
Acquittals	...	...	...	...	...	4
Referred to Magistrate	...	...	...	...	...	237
Pending	...	...	...	...	...	4

3. *Seizable Offences—Other Laws*

True Reports	...	...	...	...	...	232
Opium Enactment	...	...	...	...	...	29
Minor Offences Enactment	...	...	...	...	...	17
Gambling Offences	...	...	...	...	...	14
Arms & Explosives Enactment	...	...	...	...	...	1
Aliens Enactment	...	...	...	...	...	60
Immigration Enactment	...	...	...	...	...	60
Other Offences	...	...	...	...	...	59
Convictions	...	...	...	...	...	191
Acquittals	...	...	...	...	...	3
Pending	...	...	...	...	...	4

4. *Non-Seizable Offences—Other Laws*

True Reports	...	...	...	...	...	413
Minor Offences Enactment	...	...	...	...	...	129
Other Offences	...	...	...	...	...	284
Convictions	...	...	...	...	...	135
Acquittals	...	...	...	...	...	71
Referred to Magistrate	...	...	...	...	...	134
Pending	...	...	...	...	...	7

APPENDIX "K"—(Contd.)

5. *Traffic Offences*

True Reports	...	...	...	...	...	917
Traction Engines Enactment	...	...	...	...	...	543
Minor Offences Enactment	...	...	...	...	...	374
Convictions	...	...	...	...	...	519
Acquittals	...	...	...	...	...	5
Pending	...	...	...	...	...	32

APPENDIX "L"

PERSONS ENTERING AND LEAVING FOR THE YEAR 1955

<i>Nationality</i>	<i>Entering</i>		<i>Leaving</i>	
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
American	53	16	52	17
British Indigenous	1,662	544	1,617	512
British Dyaks	1,714	221	1,400	207
British Malays	9,642	4,934	8,545	4,427
British non-Indigenous	511	259	465	230
Burmese	41	36	35	29
Chinese (British subjects and aliens)	15,587	6,656	14,435	6,215
Dutch	265	122	334	126
French	15	4	11	2
Indian and Pakistani	1,330	194	1,276	164
Indonesian	129	57	155	42
Swiss	19	3	20	4
Others	1,796	618	1,364	500
	<hr/>		<hr/>	
Total	32,764	13,664	29,709	12,475
	<hr/>		<hr/>	

APPENDIX "M"

BUILDINGS COMPLETED IN THE BRUNEI, MUARA, TUTONG AND
TEMBURONG DISTRICTS DURING 1955

- 1 Block Senior Officers' Quarters 'Plywood'.
- 1 Block of 2 Senior Officers' Quarters.
- 6 Blocks of Senior Officers' Quarters 'Luyang Type'.
- 2 Blocks of Class "B" Quarters.
- 7 Blocks of Class "C" Quarters.
- 2 Blocks of Class "E" Quarters.
- 6 Blocks of 2 Class "F" Quarters.
- 8 Blocks of Barracks—67 doors.
Extension to Malay School Sinaut.
Annex to *Istana* Darul Salam.
- 2 Blocks of Garages at *Istana* Compound.
Wireless Station at Tutong Road.
V.H.F. Station at *Bukit Saillelah*.
Supply Godown (Arcon) at Tutong Road.
- 6 Nos. Electrical Substations.
Store and Granary at Kilanas.
Office and Store (Agricultural Department) at Biram.
Slaughter houses at Tutong Road.
Pork Market.
Extension to Rest House.
Extension to one Block Class "C" Quarters.
- 3 Nos. Boat Sheds.
P.W.D. Main Store.
P.W.D. Workshop.
Furniture/Road/Water Works Store.
Equipment Store.
- 3 Blocks of (3 pin-frame) Garages.
Workshop Office.
Tyre and Battery Shop.
High Commissioner's Lodge at Muara.
Benzine Store.

Temporary Buildings.

- Domestic Service Block and Hostel.
- 3 Blocks of Barracks.
Extension to S.M.J.A. Boys School.

APPENDIX "N"

BUILDINGS COMPLETED DURING 1955 IN THE KUALA BELAIT AND
SERIA DISTRICT

- 4 Senior Officers Quarters.
- 1 Temporary Senior Officers Quarters Sungei Liang.
- 11 Class "E" Quarters.
- 10 Blocks of 2 Class "F" Quarters.
- 2 Blocks 10 Door Temporary Barracks Quarters.
- 1 Block 10 Door Temporary Barracks Sungei Liang.
- Public Works Department Compound:
 - Workshop, Machine Shop, General Store and Furniture Store.
- New Customs Building.
- Panaga Field Force:
 - Drill Shed, Office, Stores and Garages.
- Pork Markets at Kuala Belait and Seria.
- Fish, Meat and Vegetable Market at Seria.
- 3 Room extension to Kuala Belait Resthouse.

BUILDINGS UNDER CONSTRUCTION AT END OF 1955

Istana Panaga.

- New Malay Schools Kuala Belait and Seria.
- Telephone Exchange Kuala Belait.
- Extension to District Office Seria.
- Garages for Electrical and Municipal Departments.
- Public Works Department Compound:
 - Service Station, Blacksmith Shop and Paint Shop.
- 2 Blocks 10 Door Municipal Barracks Kuala Belait.
- 3 Blocks 10 Door P.W.D. Barracks Kuala Belait.

APPENDIX "O"

ELECTRICAL DEPARTMENT

PROFIT AND LOSS

<i>Creditor</i>		<i>Debtor</i>
Electricity Supply		Electricity Supply
Excess Revenue over Expenditure	\$87,430.65	Interest on Capital \$919,129.85 @ 3½% \$32,169.54
Wiring		Redemption Fund Con- tribution on plant \$919,129.85 @ 5% 45,956.49
Excess Revenue over Expenditure	127.95	
Hire of Electrical Appliances		Hire of Electrical Appliances
Excess Revenue over Expenditure	\$23,670.17	Interest on Capital \$121,305.37 @ 3½% \$ 4,245.69
Interest on Redemption Fund \$66,224.15 @ 3½%	2,317.85	Redemption Fund Con- tribution on applian- ces \$121,305.37 @ 20% 24,261.07
		Profit 1955 6,913.83
	<u>\$113,546.62</u>	<u>\$113,546.62</u>

APPENDIX "P"

BRUNEI

BRITISH RESIDENTS

	1906/May	1907 — M. S. H. McArthur
May	1907/Dec.	1907 — H. Chevallier
Jan.	1908/April	1908 — M. S. H. McArthur
April	1908/Sept.	1909 — J. F. Owen
Sept.	1909/Nov.	1909 — B. O. Stoney (Acting)
Nov.	1909/Nov.	1913 — H. Chevallier
Nov.	1913/Dec.	1914 — F. W. Douglas
Jan.	1915/May	1916 — E. B. Maundrell
May	1916/Mar.	1921 — G. E. Cator
Mar.	1921/Mar.	1923 — L. A. Allen
Mar.	1923/Feb.	1926 — E. E. F. Pretty
Mar.	1926/Mar.	1927 — O. E. Venables
Mar.	1927/May	1928 — E. E. F. Pretty
May	1928/Jan.	1929 — P. A. B. McKerron
Jan.	1929/Aug.	1929 — R. J. F. Curtis
Aug.	1929/Sept.	1931 — P. A. B. McKerron
Sept.	1931/Oct.	1934 — T. F. Carey
Nov.	1934/Jan.	1937 — R. E. Turnbull
Jan.	1937/Dec.	1939 — J. Graham Black
Jan.	1940/Dec.	1941 — E. E. Pengilley
July	1946/Jan.	1948 — W. J. Peel
Jan.	1948/Aug.	1948 — L. H. N. Davis
Aug.	1948/June	1951 — E. E. F. Pretty
July	1951/June	1953 — J. C. H. Barcroft
June	1953/July	1954 — J. O. Gilbert
July	1954/Oct.	1954 — D. H. Trumble
Oct.	1954	J. O. Gilbert

APPENDIX "P"—(Contd.)

ASSISTANT RESIDENTS

May	1905/May	1907 — F. A. S. McClelland
May	1907/June	1908 — J. C. Sugars
June	1908/Feb.	1910 — B. O. Stoney
Mar.	1910/May	1911 — W. H. Lee-Warner
Mar.	1911/Jan.	1913 — E. A. Dickson
Jan.	1913/1914	— W. H. Lee-Warner
	1914/1930	— Abolished
Jan.	1931/Sept.	1931 — T. F. Carey
Oct.	1931/Sept.	1933 — R. C. Gates
Aug.	1933/April	1935 — A. Glencross
April	1935/Mar.	1936 — D. A. Somerville
Mar.	1936/May	1938 — H. Hughes-Hallett
May	1938/April	1940 — E. C. C. Barrett
May	1940/Dec.	1941 — R. N. Turner
July	1946/Jan.	1947 — C. J. Briscoe
Jan.	1947/Dec.	1947 — N. H. Wood
Dec.	1947/Mar.	1949 — D. C. I. Wernham
Mar.	1949/Oct.	1949 — I. Harper (Kuala Belait)
Oct.	1949/June	1950 — I. Harper (Brunei)
Oct.	1949/Mar.	1951 — R. C. S. Bell (Kuala Belait)
Sept.	1950/Oct.	1951 — P. Scanlon (Brunei)
Mar.	1951/Nov.	1953 — G. A. T. Shaw (Kuala Belait)
Oct.	1951/April	1952 — R. G. Keech (Brunei)
April	1952/April	1953 — M. M. McSporran (Brunei)
Nov.	1953/Feb.	1954 — H. P. K. Jacks (Kuala Belait)
April	1953/Oct.	1954 — J. T. Weekes (Brunei)
Feb.	1954/	— P. A. Coates (Kuala Belait)
Oct.	1954/	— R. H. Morris (Brunei)

NOTE:— The appointment of Assistant Resident was abolished in 1915 and was not recreated until 1931 consequent upon the development of the Seria Oilfields, Kuala Belait. The appointment of Assistant Resident Brunei was created in October, 1949.



UNIVERSITY OF MINNESOTA
wils (yr. 1953-1955)
319.91 G798
Brunei.
Annual report / State of Brunei.



3 1951 001 222 013 0

Minnesota Library Access Center



9 ZA R02 D05 S10 TK X